TSD File Inventory Index

Date: Sept. 29, 2006

Initial: C. [illegible]

Facility Name: Precision Twist Drill Company (Oak Field Site)

Facility Identification Number: ILD 005 076 567

A.1 General Correspondence		B.2 Permit Docket (B.1.2)	
A.2 Part A / Interim Status	Y	.1 Correspondence	
.1 Correspondence	Y	.2 All Other Permitting Documents (Not Part of the ARA)	
.2 Notification and Acknowledgment	Y	**C.1 Compliance - (Inspection Reports)**	Y
.3 Part A Application and Amendments	X	**C.2 Compliance/Enforcement**	X
.4 Financial Insurance (Sudden, Non Sudden)		.1 Land Disposal Restriction Notifications	
.5 Change Under Interim Status Requests		.2 Import/Export Notifications	
.6 Annual and Biennial Reports		**C.3 FOIA Exemptions - Non-Releasable Documents**	
A.3 Groundwater Monitoring		**D.1 Corrective Action/Facility Assessment**	Y
.1 Correspondence		.1 RFA Correspondence	
.2 Reports		.2 Background Reports, Supporting Docs and Studies	
A.4 Closure/Post Closure	X	.3 State Prelim. Investigation Memos	
.1 Correspondence	Y	.4 RFA Reports	X
.2 Closure/Post Closure Plans, Certificates, etc	Y	**D. 2 Corrective Action/Facility Investigation**	
A.5 Ambient Air Monitoring		.1 RFI Correspondence	
.1 Correspondence		.2 RFI Workplan	
.2 Reports		.3 RFI Program Reports and Oversight	
B.1 Administrative Record		.4 RFI Draft /Final Report	

Total - 1

.5 RFI QAPP		.7 Lab data, Soil Sampling/Groundwater	
.6 RFI QAPP Correspondence		.8 Progress Reports	
.7 Lab Data, Soil-Sampling/Groundwater		D.5 Corrective Action/Enforcement	
.8 RFI Progress Reports		.1 Administrative Record 3008(h) Order	
.9 Interim Measures Correspondence		.2 Other Non-AR Documents	
.10 Interim Measures Workplan and Reports		D.6 Environmental Indicator Determinations	
D.3 Corrective Action/Remediation Study		.1 Forms/Checklists	
.1 CMS Correspondence		E. Boilers and Industrial Furnaces (BIF)	
.2 Interim Measures		.1 Correspondence	
.3 CMS Workplan		.2 Reports	
.4 CMS Draft/Final Report		F Imagery/Special Studies (Videos, photos, disks, maps, blueprints, drawings, and other special materials.)	
.5 Stabilization		G.1 Risk Assessment	
.6 CMS Progress Reports		.1 Human/Ecological Assessment	
.7 Lab Data, Soil-Sampling/Groundwater		.2 Compliance and Enforcement	
D.4 Corrective Action Remediation Implementation		.3 Enforcement Confidential	
.1 CMI Correspondence		.4 Ecological - Administrative Record	
.2 CMI Workplan		.5 Permitting	
.3 CMI Program Reports and Oversight		.6 Corrective Action Remediation Study	
.4 CMI Draft/Final Reports		.7 Corrective Action/Remediation Implementation	
.5 CMI QAPP		.8 Endangered Species Act	
.6 CMI Correspondence		.9 Environmental Justice	

Note: Transmittal Letter to Be Included with Reports.
Comments: Che fields late

A.2 Part A/
Interim Status

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

APR 9 1982

Ernest Pertle
Precision Twist Drill Co.
301 Industrial Ave.
Crystal Lake, Illinois 60014

RE: Interim Status Acknowledgement USEPA ID No. ILD005076567
FACILITY NAME: Precision Twist Drill Co.

Dear Mr. Pertle:

This is to acknowledge that the U.S. Environmental Protection Agency (USEPA) has completed processing your Part A Hazardous Waste Permit Application. It is the opinion of this office that the information submitted is complete and that you, as an owner or operator of a hazardous waste management facility, have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. However, should USEPA obtain information which indicates that your application was incomplete or inaccurate, you may be requested to provide further documentation of your claim for Interim Status. Our opinion will be reevaluated on the basis of this information.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265, or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The printout enclosed with this letter identifies the limit(s) of the process design capacities your facility may use during the interim status period. This information was obtained from your Part A Permit application. If you wish to handle new wastes, to change processes, to increase the design capacity of existing processes, or to change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 122.23; your facility may operate under interim status until such time as a permit is issued or denied. This will be preceded by a request from this office or the State (if authorized) for Part B of your application. Please contact Arthur Kawatachi of my staff at (312) 886-7449, if you have any questions concerning this letter or the enclosure.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosure

cc: Clarence W. Matz, Ex. V.P. Mfg.

PAP

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

• ILD005076567 REACKNOWLEDGEMENT

PRECISION TWIST DRILL CO
301 INDUSTRIAL AVE
CRYSTAL LAKE IL 60014

INSTALLATION ADDRESS

301 INDUSTRIAL AVE
CRYSTAL LAKE IL 60014

EPA Form 8700-12B (4-80)

09/28/81

print or type with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

I. INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

0001070 AUG 25 80

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F ILD005076567 T/A 2 C 1	A	80818

I. NAME OF INSTALLATION

PRECISION TWIST DRILL Co

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3301 INDUSTRIAL AV

CITY OR TOWN: CRYSTAL LAKE, ST.: IL ZIP CODE: 60014

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 301 INDUSTRIAL AV

CITY OR TOWN: CRYSTAL LAKE ST.: IL ZIP CODE: 60014

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: PERTLE ERNEST SAFETY ENGINEER

PHONE NO. *(area code & no.)*: 815-459-2040

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: PRECISION TWIST DRILL AND MACHINE Co

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*: M

F = FEDERAL
M = NON-FEDERAL

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [X] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [X] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.: ILD005076567

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

AUG 20 1980

CONTINUE ON REVERSE

I. FOR OFFICIAL USE ONLY

S														T/A	C
W	I	L	D	0	0	5	0	7	6	5	6	8	7	21	
1	2												13	14	15

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F001 ①	F011 ②	100			
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

☐ 1. IGNITABLE (D001) ☐ 2. CORROSIVE (D002) ☐ 3. REACTIVE (D003) ☒ 4. TOXIC (D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
C. W. Matz	C. W. MATZ - EXEC. V.P	8-18-80

EPA Form 8700-12 (6-80) REVERSE

① SPENT TRICHLORETHYLENE

② SPENT BARIUM CHLORIDE SLUDGE

5HW-12

NOV 2 9 1983

Mr. John W. Carter, Corporate Safety Director
Precision Twist Drill Company
One Precision Plaza
Crystal Lake, IL 60014-4002

Re: Precision Twist Drill Company
ILD005076567

Dear Mr. Carter:

The United States Environmental Protection Agency has reviewed your request to withdraw your Part A hazardous waste permit application. On the basis of the information you provided, we determined that your operation included treatment, storage, or disposal of hazardous waste subject to 40 CFR 265 (or 35 Illinois Administrative Code Section 725). Therefore, a closure plan must be submitted directly to Mr. Larry Eastep, Permit Section, Division of Land Pollution Control, Illinois EPA, 2200 Churchill Road, Springfield, Illinois 62706. Requirements for closure are found at 35 Illinois Administration Code 725. Questions on closure should be directed to Illinois EPA at the above address.

Sincerely yours,

Horst Witschonke, Chief
State Technical Unit #1

cc: Mr. Larry Eastep, IEPA
Mr. Bill Radlinski, IEPA

bcc: Part A file
Charles Lewis, State Specialist
Becky Strom, VERSAR

5HW:H.Witschonke:ns:11/23/83

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
INITIALS	NS							
DATE	11/23/83	11-28-83	11/21/83					

PRECISION TWIST DRILL CO.

ILD 005 076 567 notif G, TSD, PA

August 4, 1983

U.S. Environmental Protection Agency
5HW-13
230 S. Dearborn Street
Chicago, Illinois 60604

Atten: Ms. Zetta Davis

Subject: Letter of Withdrawal - Part A Application

Dear Ms. Davis,

This letter is in response to a July 27, letter to Precision Twist Drill Company from Mr. Robert Kuyhendall of the IEPA, Division of Land Pollution Control regarding proof of financial responsibility as required by Federal Regulations.

The intent of this letter is to notify you of our request to withdraw from the Part A application as a storage facility of hazardous waste material generated from our manufacturing operations.

Precision Twist Drill Company manufactures various sizes of Twist Drill Bits at our manufacturing location at 301 Industrial Avenue, Crystal Lake, Illinois. Barium wash water and sludge is generated from our heat treating operation and in the past was stored out doors in 55 gallon drums awaiting pickup and disposal. On many occasions these wastes were stored over 90 days. We now have made arrangements for these wastes to be hauled from our plant on a regular basis and storage will not exceed 90 days.

Our other two hazardous wastes, waste coolant oil and water and trichlorethylene, are not being stored more than 90 days and are routinely hauled from our plant.

Anticipated annual volumes generated for each of the above waste streams are as follows:

continued...

RECEIVED 8/11/83

RECEIVED
AUG 1 3 1983
WASTE MANAGEMENT BRANCH

One Precision Plaza
Crystal Lake, Illinois 60014-4002
815-459-2040

ZD 9/9/83

Letter of Withdrawal - continued...

1.	Barium Wash Water	D005, USDOT Code 15	13,000 gal.per yr.
2.	Barium Sludge, Solids	D005, USDOT Code 15	2,000 gal.per yr.
3.	Trichlorethylene	F002, USDOT Code 15	2,100 gal.per yr.
4.	Waste Coolant and Water	D007, USDOT Code 15	48,000 gal.per yr.

I trust this information fulfills our requirements regarding Part A application withdrawal.

Very truly yours,

John W. Carter
Corporate Safety Director

JWC/ps

cc. Mr. Andrew Vollmer
Illinois EPA
Division of Land Pollution Control
2200 Churchill Rd.
Springfield, Illinois 62706

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175 244

FORM 1 GENERAL

EPA

ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S	1	2	3	4	5	6	7	8	9	10	11	12	13	T/A	C
F	I	L	D	0	5	0	7	6	5	6	7			3	D

LABEL ITEMS

- EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill—in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill—in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold—faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)		X	
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)	X		X
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: PRECISION TWIST DRILL & MACHINE CO

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 PERTLE ERNEST SAFETY ENGINEER	815 459 2040

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 301 INDUSTRIAL AVE

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 CRYSTAL LAKE	IL	60014

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 301 INDUSTRIAL AVE

B. COUNTY NAME

MC HENRY

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 CRYSTAL LAKE	IL	60014	

EPA Form 3510-1 (6-80)

NOV 18 1980

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
C 7 (specify)	C 7 3545 (specify) metal working machine tool accessory manufacturer
C. THIRD	**D. FOURTH**
C 7 (specify)	C 7 (specify)

VIII. OPERATOR INFORMATION

A. NAME

PRECISION TWIST DRILL & MACHINE CO

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

P (specify)

D. PHONE (area code & no.)

C A 815 459 2040

E. STREET OR P.O. BOX

301 INDUSTRIAL AVE

F. CITY OR TOWN

C B CRYSTAL LAKE

G. STATE IL

H. ZIP CODE 60014

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water) C T I 9 N	**D. PSD** (Air Emissions from Proposed Sources) C T I 9 P
B. UIC (Underground Injection of Fluids) C T I 9 U	**E. OTHER** (specify) C T I 9 2 7922 81 (specify) IEPA
C. RCRA (Hazardous Wastes) C T I 9 R	**E. OTHER** (specify) C T I 9 2 99826 (specify) IEPA

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

F9: A/SO

XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of high speed twist drill bits

F9: A/S1

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Clarence W. Matz, Ex. V.P. Mfg.	Clarence W Matz	11/17/80

COMMENTS FOR OFFICIAL USE ONLY

C

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

244

FORM 3 RCRA

ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	F	1	L	D	0	0	5	0	7	6	5	6	7	T/A	C
														3	I

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS
23	24 - 29	

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 71 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 71 2. NEW FACILITY *(Complete item below.)*

C	YR.	MO.	DAY	FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*
8	6 5	0 7	0 1	
15	73 74	75 76	77 78	

YR.	MO.	DAY	FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN
73 74	75 76	77 78	

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 72 1. FACILITY HAS INTERIM STATUS

[ ] 73 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U

UNIT OF MEASURE	UNIT OF MEASURE CODE
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H

UNIT OF MEASURE	UNIT OF MEASURE CODE
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	C													T/A	C
														2	I

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
	16 - 18	19 - 27	28	29 - 32
X-1	S 0 2	600	G	
X-2	T 0 3	20	E	
1	S 0 3	3000 000	Y	
	S 0 2	3273 000	G	
3	S 0 1	275 000	G	
4	S 0 1	3200 000	G	

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
	16 - 18	19 - 27	28	29 - 32
5	S 0 1	220 000	G	
6	S 0 2	6000 000 9273 000	G	
7	S 0 1	92 000 9787 000	G	
8				
9				
10				

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Line No. 1: Contaminated oil dry listed by IEPA as special waste non-hazardous

Line No. 5: Process discontinued

NOTE: Storage volumes listed in item III B

Estimated maximum storage for 6-12 month duration; probable storage volumes are less; anticipated storage time will be less than 90 days under normal conditions.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** — Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** — For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1): W 1 L D 0 0 5 0 7 6 5 6 7 | T/A: 3 | C: 1

FOR OFFICIAL USE ONLY: W | DUP | T/A: 3 | C: 2 | DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F001	245000	T	S02	See Note IV E Line #1
2	D005	2400000	P	S01	See Note IV E Line #2
3	F011	14000	T	S01	See Note IV E Line #2
4	P030	3000	T	S01	See Note IV E Line #3
5	D005	~~55,200~~ 55200000	P	S01	See Note IV E Line #4
6	D001	500	T	S02	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

NOTE:

Line 1: Temporary storage and shipped to disposal facility
Process modification expected to reduce waste

Line 2: Temporary storage and shipped to disposal facility.
Process modification expected soon to eliminate waste stream.

Line 3: Process discontinued. Temporary storage to be shipped to
Disposal facility.

Line 4: Temporary storage and shipped to disposal facility.

EPA I.D. NO. (enter from page 1)

F 1 L D 0 0 5 0 7 6 5 6 7 T/A 3 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).* F6 : A/S6

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).* F6 : A/S6

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
42 15 00	088 ~~88~~ 18 45 00

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
E [redacted]	[redacted]

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F [redacted]	G [redacted]		

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
Clarence W. Matz Ex. V.P./ Mfg.	Clarence W Matz	11/17/80

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

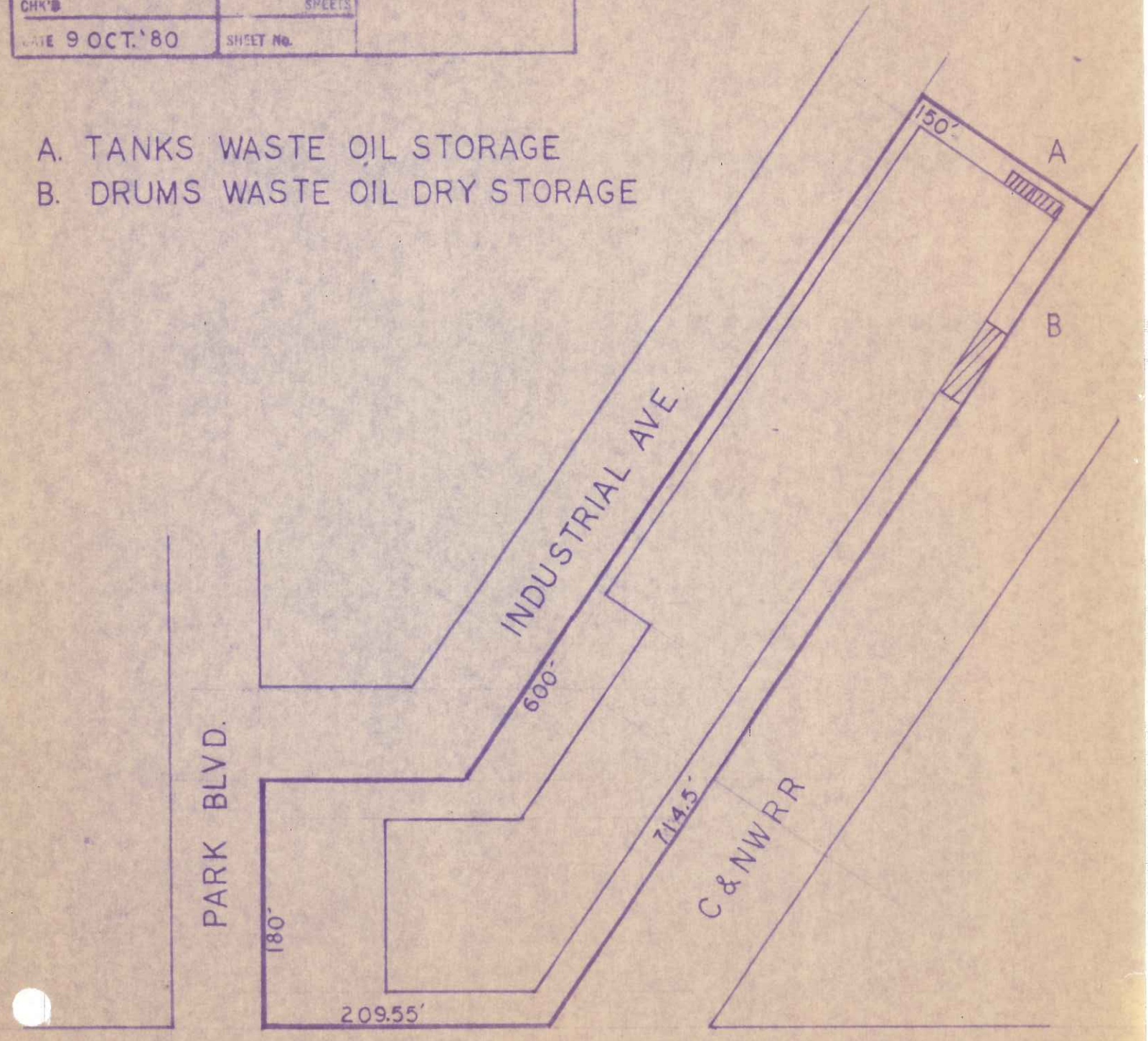
TITLE

WASTE STORAGE AREAS

PRECISION TWIST DRILL AND MACHINE CO.
CRYSTAL LAKE, ILL.

DRAWN RDD	SCALE 1" = 100'
CHK'D	SHEETS
DATE 9 OCT. '80	SHEET No.

A. TANKS WASTE OIL STORAGE
B. DRUMS WASTE OIL DRY STORAGE



Form Approved OMB No. 158-S80004

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V. FACILITY DRAWING *(see page 4)*


ROADWAY


PRECISION TWIST DRILL


PRECISION TWIST DRILL & MACHINE CO

PRECISION TWIST DRILL AND MACHINE CO. ILD005076567

301 Industral Ave.

Crystal Lake ,IL 60014

EXHIBIT 1A

LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, IN THE RESUBDIVISION OF BLOCK 2, IN STERNS ADDITION TO CRYSTAL LAKE, BEING A PART OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 44NORTH, RANGE 8EAST OF THE THIRD PRINCIPAL MERIDIAN, IN Mc HENRY COUNTY, ILLINOIS.

LOTS 1, 2, 3, 4, 5, and 6, IN BLOCK 3 OF STERNE'S ADDITION TO CRYSTAL LAKE, BEING A PART OFTHE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN , IN McHENRY COUNTY ,ILLINOIS

A.4 Closure/ Post-Closure

USEPA

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR RENEE CIPRIANO, DIRECTOR

217/524-3300

March 25, 2003

CERTIFIED MAIL
7002 2030 0001 1879 5920

Mr. Ian Hainesworth
Precision Twist Drill Company
Mr. Ian Hainesworth
301 Industrial Avenue
Crystal Lake, Illinois 60012

Re: 1110150007 -- McHenry County
Precision Twist Drill Company
ILD005076567
RCRA-Closure
Closure Log No. C-598 (Certification)
Received: January 7, 2003

Dear Mr. Hainesworth:

This is in response to the certification of closure submitted January 6, 2003 on your behalf by Dennis Kugle, Gannett Fleming for the RCRA closure of two units, the Outdoor Storage Pad Area and the Barium Wastewater Tank Area at the above-referenced facility. (A drawing showing the location of the subject units within the facility is attached.) This certification which you signed by a representative of the owner/operator and which was signed by an independent licensed professional engineer, James B. Lund, P.E., indicated that the subject hazardous waste management unit(s) had been closed in accordance with the plan approved by the Illinois EPA.

The subject hazardous waste management units were inspected by a representative of the Illinois EPA on February 4, 2003. The inspection revealed that the units were closed in accordance with the approved closure plan. In addition, a review of the closure documentation report included in the subject submittal also indicates that the units were closed in accordance with the approved closure plan. Therefore, the Illinois EPA has determined that closure of the Outdoor Drum Storage Area and Indoor Washwater Tank Area at the above referenced facility has apparently met the requirements of 35 IAC 725 subject to the following conditions:

1. The Precision Twist facility located at 301 Industrial Avenue in Crystal Lake Illinois (PIN 14-33-180-015) is subject to an Environmental Land Use Control recorded with the McHenry County Recorder of Titles on April 4, 2002 as Document Number(s) 2002R0031600 and 2002R0031601. This ELUC shall apply in perpetuity to the facility and

shall not be released until: (1) Illinois EPA determines that there is no longer a need for this ELUC; (2) Illinois EPA, upon written request from the property owner and in accordance with 35 Ill. Adm. Code 742.1010, issues an amended certification of closure or a permit modification approving modification/elimination of the ELUC requirements; and (3) a release or modification of the ELUC is filed on the chain of title for the property.

2. The approved ELUC places the following restrictions on the subject property:

   a. All groundwater located beneath the site cannot/will not be used as a potable supply of water.

3. Failure to comply with the limitations or requirements of an ELUC may result in voidance of an Agency no further action determination in accordance with the program under which the determination was made. The failure to comply with the limitations or requirements of an ELUC may also be grounds for an enforcement action pursuant to Title VIII of the Illinois Environmental Protection Act.

4. At no time shall this site be used in a manner inconsistent with the land use limitations established in the approved ELUC, unless: (1) attainment of objectives appropriate for the new land use is achieved, and (2) a new no further action determination is obtained from Illinois EPA and subsequently recorded in accordance with 35 Ill. Adm. Code 742.

   a. Requests to release or modify an ELUC must be formally requested in writing from Illinois EPA as: (1) a request to amend the certification of closure; or (2) a permit modification request. Sufficient information must be provided in these requests to demonstrate that the requested change meets all the requirements of 35 Ill. Adm. Code 742.

   b. Any final approval by Illinois EPA of a request to release or modify an ELUC must be filed with the chain of title for the subject facility.

5. Acceptance of this certification by Illinois EPA completes Precision Twist's interim status responsibilities. Management of hazardous waste at this facility in the future must meet the requirements of 35 Ill. Adm. Code 721, 722, 723, 726 and 728.

Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding this matter, please contact Ryan Bennett at 558-2150 for the groundwater aspect and Benjamen Ige at 217/785-8061 for the soil part of this project.

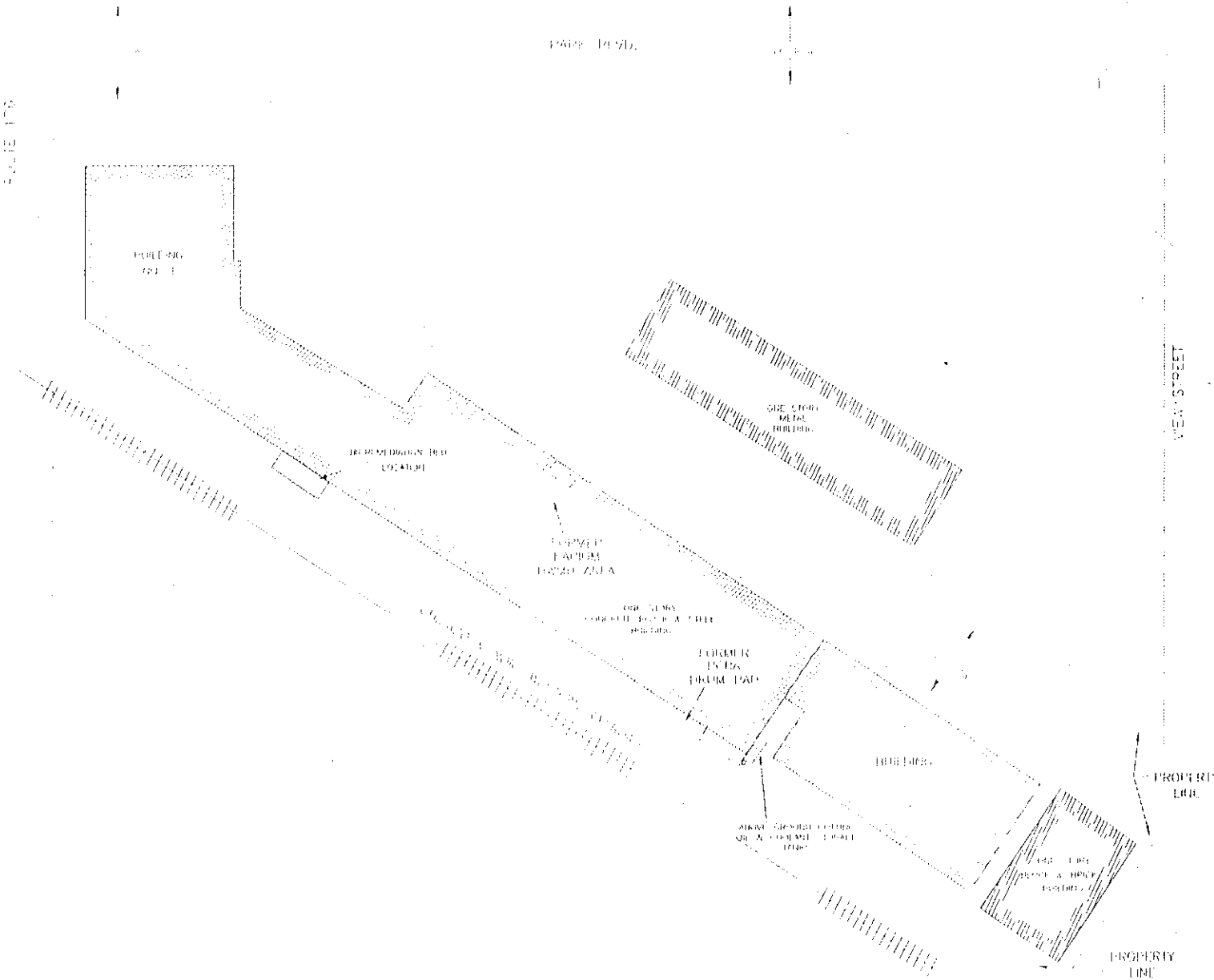
Sincerely,

Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

JLM:BI\mls\033072s.doc

Attachment: Site Layout Map

cc: USEPA Region V



GaiaTech INC.

Environmental Planning for Business

One North Franklin • Suite 3100 • Chicago • Illinois • 60606

312 541 4700 • FAX 312 541 0340

PRECISION

DRAWN	CHECK	DATE	SCALE	PROJECT NO.
PB	SK	3/29/05	1" = 100'	1006

C.2 Compliance/ Enforcement

JUN 07 1990

5HR-12

Mr. Chuck Mullen
Corporate Safety Coordinator
Precision Twist Drill
301 Industrial Avenue
Crystal Lake, Illinois 60201

Re: Land Disposal Restrictions
Precision Twist Drill
ILD 005 076 567

Dear Mr. Mullen:

On April 7, 1990, the Illinois Environmental Protection Agency (IEPA), representing the U.S. Environmental Protection Agency, conducted a Resource Conservation and Recovery Act (RCRA) inspection of the above-referenced facility. The purpose of the inspection was to determine the facility's compliance with the applicable hazardous waste management requirements of RCRA, including the Federal land disposal restrictions. The land disposal restrictions for F001-F005 spent solvents and dioxin-containing wastes became effective on November 8, 1986, for California List hazardous wastes on July 8, 1987, for the First Third of hazardous wastes on August 8, 1988, and for the Second Third of hazardous wastes on June 8, 1989, (40 CFR Part 268 and revisions to 40 CFR Parts 260-265 and 270-271).

With respect to the land disposal restrictions section of the inspection, your facility was found to be in compliance with the requirements. A copy of the inspection report is enclosed for your records.

If you have any questions regarding this correspondence, please contact Ms. Barbara Russell of my staff at (312) 353-7922.

Sincerely yours,

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section

Enclosure

cc: Harry Chappel, IEPA-CMS
Glenn Savage, IEPA-FOS
James Beck, Precision Twist Drill
5HR-12:B.RUSSELL:ev:3-7928:6/6/90:DISK #1:FILENAME::Mullen

EV 6-6-90

RCRA ENFORCE-MENT	FEB STAFF	[illegible] SECTION CHIEF	[illegible] BRANCH CHIEF
INIT. DATE	BR 6/6/90	P.E.D. 6-6-90	

RCRA LAND DISPOSAL RESTRICTION INSPECTION

Facility: Precision Twist Drill

U.S. EPA I.D. No. : ILD005076567 / ILN150007

Street: 301 Industrial Ave

City: Crystal Lake State: IL Zip: 60014

Telephone: (815) 459-2040

Owner/Operator: James Beck

Street: Same as above

City: _____ State: _____ Zip: _____

Telephone: _____

RECEIVED MAY 25 1990 OFFICE OF RCRA WASTE MANAGEMENT DIVISION EPA, REGION V

Inspection Date: 04/17/90 Time: 9:00AM - 12:30pm

Weather Conditions: @ 45°F, dry, sunny

Inspectors:	Name	Agency/Title	Telephone
	Laura Tavares	IEPA/ERS	(708) 345-9780
Facility Representative:	Chuck Mullen	Corporate Safety Coordinator	(815) 459-2040

	Generate	Transport	Treat	Store	Dispose
F-Solvent	✓				
Dioxin					
California List					
First Third					
Second Third					

Revised 10-20-89

RECEIVED 10 MAY 1990 IEPA/DLPC

RECEIVED NOV 22 1989 IEPA/DLPC

INSPECTION SUMMARY

Processes That Generate LDR Wastes

Generated from 3 vapor degreasing tanks.

LDR Waste Management

Sent to Hydrite in Cottage Grove, IL for recycling

Summary

No "apparent" Land Ban violations were observed!
- See attached narrative -

Precision Twist Drill
1110150007 - McHenry
ILD005076567
04-17-90

NARRATIVE

Precision Twist Drill manufactures various sized high speed drill bits. Processes that generate hazardous waste include heat treating, parts cleaning and degreasing. The facility generates and stores hazardous waste.

HAZARDOUS WASTES

Barium Wash Water

D005
Generated from the heat treating process.
Rate of generation: Approximately 1666/3mo. Sent to Chem Clear in Chicago, IL for treatment.
On-site: Approximately 4,000 gal accumulating in barium wash water tank and 7 55 gal drums. (photos 1 & 2).
Trichloroethylene

F001
Generated from 3 vapor degreasing tanks.
Rate of generation: approximately 990/2mo. Sent to Hydrite in Cottage Grove, IL for recycling.
On-site: one 55 gal drum (photo 3).

Barium Solids

D005
Generated from the heat treating process.
Rate of generation: Approximately two 55 gal drums a week.
Sent to Envirosafe Services of Ohio in Oregon, Ohio for landfilling.
On-site: 36X55 gal drums (photo 4).

HAZARDOUS WASTE UNITS

Container Storage Area (S01)

The container storage area is located outside, east of the main building. The pad is made of concrete. "Danger-Unauthorized Personnel Keep Out" signs were posted on the wall. There were 35X55 gal. drums in storage.

Underground Storage Tank (S02)

The size of the underground storage tank is approximately 1,500 gal. Facility personnel believe the UST contained waste cooling oil about 12 years ago. In 1988, FIW Inc. located in Pecatonica, IL certified the UST as empty. The facility has submitted closure plans to the IEPA and is waiting for approval to begin closure activities. The UST is not "RCRA closed".

Apparent Violations

725.113(b) - The waste analysis did not include parameters for which each hazardous waste will be analyzed for, sampling and test methods to be used, and frequency with which the initial analyses will be reviewed or repeated.

725.115(b) - Operating record must identify the types of problems which are to be looked for during the inspection.

725.115(d) - No inspection time or physical description of the waste was included.

725.116(d) - Personnel Training records did not include a written description of the job, type of training both introductory and continuing or keep records documenting training.

725.134(a) - There is no internal alarm or emergency communication device in trichlorethlene room.

725.173(b)(1) - The operating record did not include its methods of storage, treatment or disposal, nor did it include the physical description of the waste as identified in Appendix A.

LT:lb:04751

RCRA LAND DISPOSAL RESTRICTION INSPECTION

WASTE IDENTIFICATION

1. Does the facility handle the following wastes?

   a. F001 through F005 spent solvents

      Yes ✓ No ___ List* F001

   b. Dioxin-containing Wastes

      Yes ___ No ✓ List* _____

   c. California List Wastes

      Yes ___ No ✓ List* _____

   d. First and Second Third Wastes

      Yes ___ No ✓ List* _____

   * List wastes if room allows or attach Appendix A.

   Note: Please be aware of potential misclassification of wastes (i.e., California list/"soft hammer"/characteristic waste applicabilities).

2. Does the facility handle the following wastes (national capacity variances)?

   a. F001 - F005 contaminated soil or debris resulting from a CERCLA response action or RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments _____

   b. Dioxin contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments _____

   c. California list contaminated soil or debris resulting from a CERCLA response action or a RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments _____

d. First Third wastes with the following waste codes: K048, K049, K050, K051, K052, or K071 (effective date - 08/08/90).

Yes ___ No ✓ Comments _____

e. First Third contaminated soil and debris which have a treatment standard based on incineration - K016, K018, K019, K020, K022, K024, K030, K037, K048-K052, K086, K087, K101, K102, K103, and K104 (effective date — 08/08/90).

Yes ___ No ✓ Comments _____

f. Second Third contaminated soil and debris which have a treatment standard based on incineration - F010, F024, K009, K010, K011, K013, K014, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, P111, U028, U058, U069, U087, U088, U102, U107, U109, U221, U223, U235 (effective date — 06/08/91).

Yes ___ No ✓ Comments _____

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. Treatability Group - Treatment Standards Identification

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   Yes ✓ No ___ NA ___

   If yes, check the appropriate treatability group.

   ___ Wastewaters containing solvents (less than or equal to 1% total organic carbon (TOC) by weight)
   ✓ All other spent solvent wastes

2. First and Second Third Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   Yes ___ No ___ NA ✓

   If yes, list the waste code and check the correct treatability group.

Waste Code	Wastewater*	Non-wastewater
_____	_____	_____
_____	_____	_____
_____	_____	_____

   * Less than 1% TOC by weight and less than 1% filterable solids.

3. California List Wastes: Has the generator correctly identified the required treatment technology [268.42]?

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      Yes ___ No ___ NA ✓

      If yes, specify the method: _____

b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated [40 CFR 761.70] or disposed of by other approved alternate methods [40 CFR 761.60(e)]?

Yes ___ No ___ NA ✓

If an alternative method is used, specify the method and state whether the facility has received approval from the Regional Administrator or Director, Exposure Evaluation Division, for an exemption from the incineration requirement:

_____

_____

_____

c. For hazardous waste that contains halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1,000 mg/L or 1,000 mg/Kg (except dilute HOC wastewater), is the waste incinerated in accordance with existing requirements of 40 CFR Part 264 Subpart O or 40 CFR Part 265 Subpart O?

Yes ___ No ___ NA ✓

4. Does the generator mix restricted wastes with different treatment standards?

Yes ___ No ✓ Comments _____

If yes, did the generator select the most stringent treatment standards (268.41(b), 268.43(b))?

Yes ___ No ___ Comments NA

B. Waste Analysis

1. Does the generator determine whether the restricted waste exceeds treatment standards or prohibition levels at the point of generation by:

- Knowledge of waste Yes ✓ No ___

List the wastes for which "applied knowledge" was used and describe the basis of the applied knowledge determination.

F001 starts out as a solvent, ends up as a spent solvent.

Was all supporting data retained on-site, [268.7(a)(5)]?

Yes ✓ No ___

- TCLP Yes ___ No ___ NA ✓

List the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results.

_____
_____
_____

- Total constituent analysis Yes ___ No ___ NA ✓

List the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results.

_____
_____
_____

- pH ≤ 2 Yes ___ No ___ NA ✓

List the wastes for which pH testing was used.

_____

- Paint Filter Liquid Test Yes ___ No ___ NA ✓

List the wastes for which PFLT was used.

_____

2. Does the facility dilute the restricted waste as a substitute for adequate treatment [268.3]?

Yes ___ No ✓ NA ___

C. Management

1. On-Site Management

Is restricted waste treated, stored for greater than 90 days, or disposed on-site?

Yes ___ No ✓ Comments _____

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

Yes ✓ No ___ (If no, go to b)

If yes, identify waste code and off-site treatment or storage facilities:

Waste Code	Facilities	Treat/Store
F001	Rhyalite, Cottage Grove, IL	treat

- Does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

Yes ✓ No ___

- Does notification contain the following?

EPA Hazardous waste number(s) Yes ✓ No ___

Applicable treatment standards and prohibition levels Yes ✓ No ___

Manifest number Yes ✓ No ___

Waste analysis data, if available Yes ✓ No ___

b. Does the facility ship any waste that meets the treatment standards to an off-site disposal facility?

Yes ___ No ✓ (If no, go to c)

If yes, identify waste code and off-site disposal facilities:

Waste Code	Facility

NA

- Does the facility provide notification and certification to the disposal facility [268.7(a)(2)]?

  Yes ___ No ___

- Does notification contain the following?

EPA Hazardous waste number(s)	Yes ___	No ___
Applicable treatment standards and prohibition levels	Yes ___	No ___
Manifest number	Yes ___	No ___
Waste analysis data, if available	Yes ___	No ___
Certification that the waste meets treatment standards [wording in 268.7(a)(2)(ii)]	Yes ___	No ___

c. Is the waste subject to a nationwide variance, case-by-case extension (268.5), or no migration petition (268.6).

  Yes ___ No ✓ (If no, go to d)

- If yes, does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal [268.7(a)(3)]?

  Yes ___ No ___

- Does the notification contain the following information?

EPA hazardous waste number	Yes ___	No ___
The corresponding treatment standards and all applicable prohibitions	Yes ___	No ___
Manifest number	Yes ___	No ___
Waste analysis data, if available	Yes ___	No ___
Date the waste is subject to the prohibitions	Yes ___	No ___

d. Does the facility generate any First or Second Third "soft hammer" waste?

  Yes ___ No ✓ (If no, go to 4)

NA

- Does the generator provide the following notification to the receiving facility with each shipment of waste [268.7(a)(4)]?

(i)	EPA hazardous waste number	Yes ___	No ___
(ii)	Applicable prohibition [268.33(f), 268.34(h)]	Yes ___	No ___
(iii)	Manifest number	Yes ___	No ___
(iv)	Waste analysis data, if available	Yes ___	No ___

3. "Soft Hammer" Demonstrations/Certifications

a. Are any "soft hammer" wastes or treatment residues destined for ultimate disposal in a landfill or surface impoundment?

Yes ___ No ___

b. Has the generator attempted to locate and contract with treatment and recovery facilities that provide treatment that yields the greatest environmental benefit [268.8(a)(1)]?

Yes ___ No ___

c. Has the generator submitted a demonstration and certification to the Regional Administrator to document its efforts to locate practically available treatment [268.8(a)(2)]?

Yes ___ No ___

- If yes, did the generator submit the documentation and certification prior to first shipment?

Yes ___ No ___

d. Does the demonstration contain the following information?

A list of facilities and facility officials contacted?	Yes ___	No ___
Addresses	Yes ___	No ___
Telephone numbers	Yes ___	No ___
Contact dates	Yes ___	No ___
Certification statement	Yes ___	No ___

NA

Attach a copy of the demonstration and certification.

e. If there is no practically available treatment, has the generator included with the demonstration, a written discussion of why the generator was not able to obtain treatment or recovery for that waste [268.8(a)(2)(i)]?

Yes ___ No ___ NA ___

If yes, attach a copy of written discussion.

f. Does the generator ship its "soft hammer" waste off-site for treatment?

Yes ___ No ___

Describe the type of treatment and treatment facilities:

Waste Code	Type of Treatment	Treatment Facility

g. Did the generator send a copy of its demonstration and certification to the receiving facility with the first shipment of waste?

Yes ___ No ___

h. Does the generator provide certification with each subsequent shipment of wastes to receiving facilities?

Yes ___ No ___ NA ___

4. Records Retention

Does the facility retain on-site copies of all notifications, demonstrations, and certifications for a period of 5 years [268.7(a)(6)]?

Yes ✓ No ___ Comments _____

D. RCRA Corrective Action and CERCLA Response Action Waste

1. Has the facility disposed of contaminated soil and debris from a RCRA corrective action or a CERCLA response action in a landfill or surface impoundment?

Yes ___ No ✓ Comments _____

2. Did the unit meet the minimum technology requirements (double liner, leachate collection system, and ground-water monitoring)?

Yes ___ No ___ NA ✓ Comments _____

E. Treatment Using RCRA 264/265 Exempt Units or Processes

1. Is waste treated in RCRA 264/265 exempt units (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)? _____

No exempt units

Yes ___ No ✓

List types of waste treatment units and processes:

Waste Code	Type of Treatment	Treatment Units and Processes

2. Are treatment residuals generated from these units?

Yes ___ No ___ Comments NA

If yes, the residues are subject to the LDR generator requirements.

3. Are these residuals further treated, stored for greater than 90 days, or disposed on-site?

Yes ___ No ___ NA ✓ Comments _____

If yes, the TSD checklist must be completed.

5HS-12

06 APR 1988

Mr. Chuck Mullen
Precision Twist Drill Company
301 Industrial Avenue
Crystal Lake, Illinois 60014

Re: Land Disposal Restrictions
Precision Twist Drill Company
ILD 005 076 567

Dear Mr. Mullen:

On December 22, 1987, a representative of the Illinois Environmental Protection Agency inspected the above-referenced facility. The purpose of the inspection was to determine the facility's compliance with the Resource Conservation and Recovery Act, including the Federal land disposal restrictions on F001-F005 spent solvents which became effective on November 8, 1986, (40 CFR Part 268, and revisions to 40 CFR Parts 260-265 and 270-271). A copy of the inspection report is enclosed for your information.

At the time of the inspection the facility was operating as a small quantity generator (SQG), generating less than 1000 kilograms (kg) of hazardous wastes in a calendar month. As a SQG, your facility is subject to the hazardous waste requirements found under 35 Illinois Administrative Code 722 and 40 CFR Part 268.

SQGs have been granted a two-year national variance to the Federal land disposal restrictions under 40 CFR Sections 268.1 and 268.30. However, any restricted wastes from a SQG must be accompanied by a notification stating that the waste is exempt from the land disposal restrictions, as required under 40 CFR Section 268.7(a)(3). All SQGs generating more than 100 kg but less than 1000 kg of hazardous waste in a calendar month will become subject to the land disposal restrictions on November 8, 1988, when the variance expires.

Additionally, if your facility begins generating 1000 kg or more of hazardous waste, or more than 1 kg of acutely hazardous waste in any month, it would be categorized as a generator and become subject to all applicable federal and State hazardous waste laws, including the 40 CFR 268 land disposal restrictions.

Thank you for your cooperation. If you have any questions concerning this letter, please contact Sharon R. Travis of my staff at (312) 886-6533.

Sincerely yours,

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section

Enclosure

cc: Harry Chappel, IEPA
Glenn Savage, IEPA

5HS-12:STRAVIS:3/30/88:ev DISK #4

	ORIGINAT	AUTHOR	OTHER STAFF	UNIT CHIEF	SECT. SECTY	SECT. CHIEF	BRANCH CHIEF	WATER BR.
CONCUR. DATE	E.V. 3/30/88	3-30-88		3/30/88	3/31/88	3/31/88		

Inspector: M. Glynn
Address: 1701 s 1st ave
Maywood Il, 60153
Telephone No: (312) 345-9780

DRAFT
RCRA LAND RESTRICTION F-SOLVENT
GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

A. Handler Name: Precision Twist Drill CO.
B. Street (or other identifier): 301 Industrial Ave
C. City: Crystal Lake
D. State: Il
E. Zip Code: 60014
F. County Name: McHenry
G. Nature of Business; Identification of Operations: Manufacture of drill bits
H. EPA ID #: ILD000507657, 1110150007
I. Handler Contact (Name and Phone Number): Chuck Mullen (815)459-2040

II. GENERATOR COMPLIANCE

A. F-Solvent Identification

1. Does the handler generate the following wastes?

a. F001 — ✓ Yes ___ No
b. F002 — ___ Yes ✓ No
c. F003 — ___ Yes ✓ No

If an F003 wastestream listed solely for ignitability has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? ___ Yes ___ No ✓ NA NO F003 wastestreams

d. F004 — ___ Yes ✓ No
e. F005 — ___ Yes ✓ No

2. Source of the above: Form 8700-12 ___; Part A ✓; Part B ___; other (specify) ✓ RCRA inspection of 12/22/87

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A. Note concerns below: No concerns wastes were correctly identified by company

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JAN 20 1988
IEPA/DLPC

Handler Name: Precision Twist Drill
ID Number: ILD000507667
Inspector: Glynn
Date: 12/22/87

B. BDAT Treatability Group - Treatment Standards Identification

Comments

1. Did the generator correctly determine the appropriate treatability group [268.41] of the waste (Wastewaters containing solvents, pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?

other spent solvents

✓ Yes ___ No

C. Waste Analysis

1. Did the generator determine whether the waste exceeds treatment standards based on [268.7(a)]:

a. Knowledge of wastes ✓ Yes ___ No

b. TCLP ___ Yes ✓ No

c. Other (specify) _____

If knowledge, note how this is adequate:
spent Trichlor, used in degreasing

If determined by TCLP, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note any problems: _____

d. Were wastes tested using TCLP when a process or wastestream changed?

___ Yes ___ No ✓ NA

NO waste stream or Process changes

2. Did the F-solvent wastes exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

✓ Yes ___ No
___ Some

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [268.3]

___ Yes ✓ No

NO Dilution

Management

1. Onsite management

a. Were F-solvent wastes managed onsite?

___ Yes ✓ No

company identifies storage on their Part A but has not stored in several years

If yes, answer 1(b) and (c); if no, answer 2.

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Handler Name: Precision Twist Drill
ID Number: ILD005076567
Inspector: G Lynn
Date: 12/22/87

b. For wastes that exceed treatment standards, was treatment, storage, and/or disposal conducted? ___Yes ✓No

Comments

no storage for past several years

If yes, TSDF Checklist must be completed.

c. Are test results maintained in the operating record [264.74(b)3/265.73(b)(3)]? ✓Yes ___No

test results are maintained but company has no operating record

2. Offsite Management

a. If F-solvent wastes exceed treatment standards, did generator provide treatment facility [268.7(a)(1)]:

(i) EPA waste number? ___Yes ✓No

(ii) Applicable treatment standard? ___Yes ✓No

(iii) Manifest number? ___Yes ✓No

(iv) Waste analysis data, if available? ___Yes ✓No

no such data provided

Generates 2 Drums / month.

last shipment 11/23/87

Identify offsite treatment facilities Safety Klean for recycling

b. If F-solvent wastes did not exceed treatment standards, did generator provide the disposal facility [268.7(a)(2)]:

✓NA F solvent waste exceeded treatment standards

(i) EPA Hazardous waste number? ___Yes ___No

(ii) Applicable treatment standard? ___Yes ___No

(iii) Manifest number? ___Yes ___No

(iv) Waste analysis data, if available? ___Yes ___No

(v) Certification that waste meets treatment standards? ___Yes ___No

Identify land disposal facilities receiving the BDAT certified wastes

Handler Name: Precision Twist Drill
ID Number: ILD005076 61
Inspector: Glynn
Date: 12/22/87

c. If waste is subject to nationwide variance [268.30] (e.g., solvent-water mixtures less than 1%), case-by-case extension [268.5] or petition [268.6] does generator provide notice to disposer that waste is exempt from land disposal restrictions [268.7(a)(3)]?

___Yes ___No ✓ NA

Comments: Not SQG

E. Storage of F-Solvent Waste

1. Was F-solvent waste stored for greater than 90 days (after variance 180/270 days for SQG) [268.50(a)(1)]?

___Yes ___No ✓ NA

Not SQG

If yes, was facility operating as a TSD under interim status or final permit? ___Yes ___No

If yes, TSDF Checklist must be completed.

F. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes?

___Yes ___No ✓ NA

NO F waste generated from exempt units or processes.

If yes, list type of treatment unit and processes

_____

_____

_____

If the residuals from a RCRA-exempt treatment unit are above the treatment standards, the owner/operator is considered a generator of restricted waste. The inspector should determine whether the generator requirements, particularly waste identification requirements, have been met for the treatment residuals.

PRECISION TWIST DRILL CO.
ONE PRECISION PLAZA • CRYSTAL LAKE, IL 60014-4002

MEMO

TO Lily Hersleons

FROM Chuck Mullen- Safety Eng. EXT. 581

DATE 28 August, 1985

SUBJECT Certification of on Site Toxic Storage

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Charles Mullen Jr.

Charles Mullen Jr.
Safety Engineer

Date 8/28/85

111015O7
STATE IDENTIFICATION NUMBER
(If Applicable)

ILOOO5O765 67
EPA IDENTIFICATION NUMBE

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A - General Facility Standards

I. General Information:

(A) Facility Name: Precision Twist Drill and Machine Co.

(B) Street: 301 Industrial Ave.

(C) City: Crystal Lake (D) State: IL (E) Zip Code: 60014

(F) Phone: 815/459-2040 (G) County: McHenry

(H) Operator: Same as above

(I) Street:

(J) City: (K) State: (L) Zip Code

(M) Phone: (N) County:

(O) Owner: Same as above

(P) Street:

(Q) City: (R) State: (S) Zip Code:

(T) Phone: (U) County:

(V) Date of Inspection: 5-11-82 (W) Time of Inspection (From) 9 30 AM (To) 11 30 AM

(X) Weather Conditions: 80° Clear

PAGES 11-18, 21, & 23-26 ARE not Applicable AND have been omitted.

Rev. 3-6-81/J.B.

	Person(s) Interviewed	Title	Telephone
(Y)	John W. Carter	Cap. Safety Dir.	815/459-2040

	Inspection Participants	Agency/Title	Telephone
(Z)	Brad Benning	IEPA/EPS	312/345-9780

(AA) Preparer Information

Name	Agency/Title	Telephone
Brad Benning	IEPA/EPS	312/345-9780

II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

X A. Storage and/or Treatment
   1. Containers (I)
   2. Tanks (J)
   3. Surface Impoundments (K)
   4. Waste Piles (L)

___ B. Land Treatment (M)

___ C. Landfills (N)

___ D. Incineration and/or Thermal Treatment (O and P)

___ E. Chemical, Physical, and Biological Treatment (Q)

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

III. GENERAL FACILITY STANDARDS:
(Part 265 Subpart B)

	Yes	No	NI*	Remark
(A) Has the Regional Administrator been notified regarding:				
1. Receipt of hazardous waste from a foreign source?	—	—	✓	NO Foreign WASTE
2. Facility expansion?	—	—	—	no expansion
(B) General Waste Analysis:				
1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	✓	—	—	
2. Does the owner or operator have a detailed waste analysis plan on file at the facility?	—	✓	—	NOT Documented
3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	—	—	✓	No waste accepted from off-site
(C) Security - Do security measures include: (if applicable)				
1. 24-Hour surveillance?	✓	—	—	Continuous operation Guards on weekend.
2. Artificial or natural barrier around facility?	✓	—	—	Partially fenced open entry way
3. Controlled entry?	—	✓	—	
4. Danger sign(s) at entrance?	—	✓	—	Signs not posted at storage area.
(D) Do Owner or Operator Inspections Include:				
1. Records of malfunctions?	—	✓	—	Inspections are
2. Records of operator error?	—	✓	—	done, but log
3. Records of discharges?	—	✓	—	sheets are

*Not Inspected

		Yes	No	NI*	Remarks
4.	Inspection schedule?	---	✓	---	not kept. Do not
5.	Safety, emergency equipment?	---	✓	---	have a written
6.	Security devices?	---	✓	---	Insp. schedule.
7.	Operating and structural devices?	---	✓	---	
8.	Inspection log?	---	✓	---	
(E)	Do personnel training records include: (Effective 5/19/81)				
1.	Job titles?	✓	---	---	In Personnel Files
2.	Job descriptions?	✓	---	---	"
3.	Description of training?	---	✓	---	No documented
4.	Records of training?	---	✓	---	Training Program
5.	Have facility personnel received required training by 5-19-81?	✓	---	---	on-Job training
6.	Do new personnel receive required training within six months?	✓	---	---	
(F)	If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed?				
1.	Special handling?	✓	---	---	Drums segregated
2.	No smoking signs?	✓	---	---	by type
3.	Separation and protection from ignition sources?	✓	---	---	

*Not Inspected

IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

		Yes	No	NI*	Remarks
(A)	Maintenance and Operation of Facility: Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
(B)	If required, does the facility have the following equipment:				Auto - Fire Alarm Pull boxes.
	1. Internal communications or alarm systems?	✓			Inter-com - Telephones
	2. Telephone or 2-way radios at the scene of operations?	✓			Telephones.
	3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			sprinkler system Fire Extinguishers absorbent, drums First Aid Room - eye wash - stations.

Indicate the volume of water and/or foam available for fire control:

200,000 gal reservoir, elect. pump. Disel back-up.
Sprinkler system in plant.

(C)	Testing and Maintenance of Emergency Equipment:				
	1. Has the owner or operator established testing and maintenance procedures for emergency equipment?	✓			Insurance Co. Check Fire Dept. Maintenance. Dept.
	2. Is emergency equipment maintained in operable conditions?	✓			
(D)	Has owner or operator provided immediate access to internal alarms? (if needed)	✓			pull boxes

*Not Inspected

(E) Is there adequate aisle space for unobstructed movement? ✓ — — _____

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

(A) Does the Contingency Plan contain the following information:	Yes	No	NI*	Remarks
1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	—	✓	—	NOT Documented. Need to incorporate HAZ. waste provisions.
2. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?	—	✓	—	
3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	—	✓	—	
4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?	—	✓	—	
5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)	—	✓	—	

*Not Inspected

	Yes	No	NI*	Remarks
(B) Are copies of the Contingency Plan available at site and local emergency organizations?		✓		
(C) Emergency Coordinator				
1. Is the facility Emergency Coordinator identified?	✓			Mr. Carter is the Emerg. Coord. although not identified in Conting. Plan.
2. Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
(D) Emergency Procedures				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?			✓	NO Emergencies

VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING
(Part 265 Subpart E)

	Yes	No	NI*	Remarks
(A) Use of Manifest System				
1. Does the facility follow the procedures listed in §265.71 for processing each manifest?			✓	NO OFF-Site WASTE
2. Are records of past shipments retained for 3 years?			✓	"
(B) Does the owner or operator meet requirements regarding manifest discrepancies?			✓	"

*Not Inspected

(C) Operating Record

1.	Does the owner or operator maintain an operating record as required in 265.73?		✓	
2.	Does the operating record contain the following information:			
**b.	The method(s) and date(s) of each waste's treatment, storage, or disposal as required in Appendix I?		✓	NOT Documented
c.	The location and quantity of each hazardous waste within the facility?		✓	"
***d.	A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)			N/A
e.	Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	✓		
f.	Reports detailing all incidents that required implementation of the Contingency Plan?	✓		
g.	All closure and post closure costs as applicable? (Effective 5-19-81)		✓	NOT AVALIABLE

** See page 33252 of the May 19, 1980, Federal Register.

*** Only applies to disposal facilities

*Not Inspected

VII. CLOSURE AND POST CLOSURE
(Part 265 Subpart G)

	Yes	No	NI*	Remarks
(A) Closure and Post Closure				
1. Is the facility closure plan available for inspection by May 19, 1981?		✓		NOT Documented.
2. Has this plan been submitted to the Regional Administrator		✓		
3. Has closure begun?		✓		
4. Is closure estimate available by May 19, 1981?		✓		
(B) Post closure care and use of property				
Has the owner or operator supplied a post closure monitoring plan? (effective by May 19, 1981)				

VIII. FACILITY STANDARDS
(Part 265, Subparts I thru R)

I
USE AND MANAGEMENT OF CONTAINERS

Facility Name: Precision Twist Drill Date of Inspection: 5-11-82

	Yes	No	NI*	Remarks
1. Are containers in good condition?	✓			
2. Are containers compatible with waste in them?	✓			
3. Are containers stored closed?	✓			
4. Are containers managed to prevent leaks?	✓			
5. Are containers inspected weekly for leaks and defects?	✓			NOT Documented.
6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive.)			✓	N/A

	Yes	No	NI*	Remarks
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.)	—	—	✓	NO Incompatibles
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	—	—	✓	"

J
TANKS

Facility Name: Precision Twist Drill Date of Inspection: 5-11-82

	Yes	No	NI*	Remarks
1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank?	✓	—	—	
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?	—	—	✓	closed Top.
3. Do continuous feed systems have a waste-feed cutoff?	—	—	✓	batch feed.
4. Are waste analyses done before the tanks are used to store a substantially different waste than before?	—	—	✓	Specific for one wast
5. Are required daily and weekly inspections done?	✓	—	—	NOT Documented.
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	—	—	✓	N/A
7. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.)	—	—	✓	N/A

*Not Inspected

	Yes	No	NI*	Remarks
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	___	___	N/A	___
4. Are inspection procedures followed according to 265.403?	___	___	___	___
5. Are the special requirements fulfilled for ignitable or reactive wastes?	___	___	___	___
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.)	___	___	___	___

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.2 or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason

IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

1. MANIFEST REQUIREMENTS

	Yes	No	NI*	Remarks
(A) Does the operator have copies of the manifest available for review?	✓	___	___	Using ILL. manifest
(B) Do the manifest forms reviewed contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements)				
1. Manifest document number?	✓	___	___	___
2. Name, mailing address, telephone number, and EPA ID Number of Generator	✓	___	___	___

		Yes	No	NI*	Remarks
3.	Name and EPA ID Number of Transporter(s)?	✓			
4.	Name, address, and EPA ID Number of Designated permitted facility and alternate facility?	✓			
5.	The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	✓			
6.	The total quantity of waste(s) and the type and number of containers loaded?	✓			
7.	Required certification?	✓			
8.	Required signatures?	✓			
(C)	Does the owner or operator submit exception reports when needed?	✓			

2. PRE-TRANSPORT REQUIREMENTS

(A)	Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off-site)	✓			
(B)	Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required to movement of hazardous waste off-site)	✓			
(C)	If required, are placards available to transporters of hazardous waste?	✓			

VI. RECORDKEEPING and REPORTING
(Part 262, Subpart D)

	Yes	No	NI*	Remarks
(A) Are Manifests, Annual Reports, Exception Reports, and all test results and analyses retained for at least three years?	✓			
(B) Has the generator submitted Annual Reports and Exception Reports as required?			✓	none required yet

VII. INTERNATIONAL SHIPMENTS
(Part 262, Subpart E)

	Yes	No	NI*	Remarks
Has the installation imported or exported Hazardous Waste?		✓		

(If answered Yes, complete the following as applicable.)

1. Exporting Hazardous waste, has a generator:				
a. Notified the Administrator in writing?			N/A	
b. Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country?				
c. Met the Manifest requirements?				
2. Importing Hazardous Waste, has the generator:				
Met the manifest requirements?				

*Not Inspected

XI. REMARKS

Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

Facility manufactures drill bits for various industries. They generate the following wastes:
F001 - Trichloroethylene ~3000 gal/year - degreasing metal parts. stored in drums prior to shippment for recycling.
D005 - Barium salts used in the heat treating process, generate waste/water, sludge, and solids from floor sweepings. - waste stored in drums

REMARKS: prior to disposal.

D001 - Combination of waste/water, cutting oil, and the Trichlor., staed in above and below ground tanks prior to recycling.
Wastes F011 and P030 - cyanide process has been discontinued and these waste streams no longer generated. Drums are staed outside, on a concrete pad, D001 is stored in 2- below ground and 1- above ground tank, this waste has a Flash pt of 200°F and if it is hazardous, it could be from the Trichlor. or the Barium. Facility lacked adequate documentation of the following: Waste Analysis Plan, Gen. Inspection Req. Personnel Training, Contingency Plan, Operating Record, and Closure Plan and Estimate.

ILLINOIS EPA
Environmental Protection Agency
1701 S. First Street Maywood, IL. 60153
312/345-9780

786

Refer to: 11101507 - McHenry County - Crystal Lake/Precision Twist Drill
ILD005076567

May 14, 1982

RECEIVED
MAY 18 1982
WASTE MANAGEMENT BRANCH
EPA, REGION V

Precision Twist Drill
301 Industrial Avenue
Crystal Lake, Illinois 60014

Attn: John W. Carter

Dear Mr. Carter:

On May 11, 1982, representatives of the Illinois Environmental Protection Agency (IEPA) conducted an inspection of the Precision Twist Drill Company. This inspection was conducted by the Illinois Environmental Protection Agency under a Cooperative Arrangement with, and authorization of, the United States Environmental Protection Agency (USEPA). The purpose of the inspection was to determine your facility's compliance status with the Resource Conservation and Recovery Act (RCRA) of 1976, P.L. 94-580, as amended. During the inspection the following deficiencies were observed:

Pursuant to 40 CFR 265.13(b), the owner/operator must have on file at the facility a detailed written waste analysis system describing the procedures to be used to compile data required under 40 CFR 265.13(a). The owner/operator is deficient in that no such plan was present at the site on the date of the inspection.

Pursuant to 40 CFR 265.14(c), the owner/operator must post a sign with the legend, "Danger-Unauthorized Personnel Keep Out" at each entrance to the active portion of the facility and at other locations which can be seen from any approach to this active portion. At the time of the inspection, no such "Danger" signs had been posted as required by 40 CFR 265.14(c).

Pursuant to 40 CFR 265.15(b), the owner/operator must develop and follow a written schedule for inspection of all equipment and devices that are important to preventing, detecting or responding to environmental or human health hazards. At the time of the inspection, the owner/operator was not able to produce such an inspection schedule as required by 40 CFR 265.15(b).

Pursuant to 40 CFR 265.16, the owner/operator is required to establish and maintain records relating to the training of personnel involved in hazardous waste management, including a description of the job title for each position at the site, a written job description, a description of training and records detailing the training given to each such individual. The owner/operator is deficient in that no such training program had been developed at the facility.

The owner/operator must have a contingency plan at the facility. The contingency plan must address the actions to be taken by facility personnel in response to fires, explosions, or any unplanned release of hazardous waste or hazardous constituents to the environment. The plan must describe the arrangements agreed to by local police, fire departments, hospitals and emergency response teams. The names, addresses, and phone numbers of all persons qualified to act as emergency coordinators must be included in the plan. The contingency plan must list all emergency equipment at the facility, including the location, a physical description, and a brief summary of the capabilities of each item on the list. In facilities where evacuation could be necessary a plan describing evacuation routes and signals used to begin evacuation must be included in the contingency plan. These requirements are pursuant to 40 CFR Part 265 Subpart D. Your facility is deficient in that such a plan was not available at the time of the inspection.

Requirements contained in 40 CFR 265.53(b) were not complied with in that copies of the contingency plan were not submitted to local emergency response organizations.

Pursuant to 40 CFR 265.73 the owner/operator must keep a written operating record at the facility. The operating record must include the following:

1) A description and the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage or disposal at the facility as required by Appendix I.

2) The location and quantity of each hazardous waste within the facility including cross-references to specific manifest document numbers.

3) Records and results of waste analyses and trial tests.

4) Summary reports and details of all incidents that require implementation of the contingency plan.

5) Records and results of inspections.

6) Monitoring and testing data.

7) All closure cost estimates and for disposal facilities all post-closure cost estimates.

Your facility is deficient in that records of operation were not available at the time of the inspection.

The owner/operator must have a closure plan at the facility. The plan must include a description of how and when the facility will be partially closed, if applicable, and ultimately closed. The plan must address the steps needed to decontaminate facility equipment. Also required is an estimate of the maximum inventory of wastes in storage or treatment on site at any given time and a schedule for final closure including the anticipated date when wastes will no longer be required. The owner/operator must submit his closure plan to the Regional Administrator at least 180 days before the date he expects to begin closure. These requirements are pursuant to 40 CFR 265.112. Your facility is deficient in that a closure plan and its cost estimate was not available at the time of the inspection.

You are hereby requested to submit to this office, within 15 days of receipt of this letter, a description of steps taken to correct the above deficiencies. Failure to correct these deficiencies may result in enforcement actions initiated by USEPA pursuant to 40 USC 6928. Please send your reply to the above address. Should you have any questions concerning this matter, please contact Brad Benning of my staff at the above number.

Sincerely,

Kenneth P. Bechely, Northern Region Manager
Field Operations Section
Division of Land Pollution Control

KPB:BPB:prb

Enclosure: Inspection Report

cc: Division File
Northern Region
U.S. E.P.A. - Region V

ISS

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

L P C F C 0 5 5 C
(1) (8) (9)

ILD005076567

OBSERVATION REPORT - SITE INVENTORY NO. 1110150 7
(11) (18)

McHenry CO. - L.P.C. Region # N Date 05/11/82
(20) (25)

Crystal Lake / Precision Twist Drill
(Location) (Responsible Party)

Letter Sent (Yes or No) N
(26)

Samples Taken: Yes ( ) No (x) Time: From 09 : 30 A m Weather 80° Clear

Ground Water( ) Surface( ) Other( ) To 11 : 30 A m

Photos Taken: Yes ( ) No (x) Interviewed John Carter Inspector B P B
(27) (29)

Previous Inspection — Previous Correspondence — Site Open: Yes(x) No( )

OPERATIONAL STATUS:		TYPE OF OPERATION:				AUTHORIZATION:	
Operating	(x)	Landfill	( )	Storage	(x)	E.P.A. Permit	( )
Temporarily Closed	( )	Random Dump	( )	Salvage	( )	Variance	( )
Closed Not Covered	( )	Other Generate	(x)	A.C.D.	( )	21(e)	( )
Closed and Covered	( )	Quantity Received Daily(1-6)	1 (30)			Board Order	( )
						Illegal (5)	(x) 5 (31)

IMPROVED

LPC 4 1/79 5,000

SAME

DETERIORATED

I S or D S
(62)

GENERAL REMARKS: No major problems were observed at the facility although they lacked the majority of the required records. They listed 3 waste streams: F001, D005, D001. Waste streams D005 and D001 should probably be retested as they may not be hazardous. The drum storage area is open, but the company operates around the clock and there is a guard service on weekends.

INTERVIEW: The facility has numerous supp' permits. Trichloroethylene to Acticon Safety Kleen, D005 to Sheffield and the D001 to Refinery Products.

The facility lacked documented records on the following

1) Waste Analysis Plan
2) Gen. Inspection Req.

DIAGRAM: 3) Personnel Training

4) Contingency Plan
5) Operating Record
6) Closure Plan - Estimate
7) Danger Signs not posted

79

301 INDUSTRIAL AVE. • CRYSTAL LAKE, ILLINOIS 60014 • PHONE AREA 815/459-2040 • TWX: 910-634-3352

PRECISION TWIST DRILL AND MACHINE CO.

March 25, 1981

United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604
Attn: 5EWHME

Gentlemen:

With regard to your inquiry concerning Precision waste, the following is true and accurate to the best of my knowledge and belief.

1. The eight attached copies of waste hauling manifests contain the correct information requested in questions 1a. and 1b., subject to the following exceptions. The first five manifests dated from November 4, 1980 through January 13, 1981 incorrectly state that Refinery Products Co. was the waste hauler and that North Branch Waste Oil was the storage or treatment site. In fact, the two names were inverted. In completing the manifests we were relying on information supplied by the hauler and the storage site, who are apparently both parts of the same operation. In any event the error was corrected in all subsequent manifests. The manifests dated February 9, 1981, February 20, 1981 and March 2, 1981 all correctly list the waste hauler as North Branch Waste, P.O. Box 1660, Des Plaines, Illinois, 60018, and the storage or treatment site as Refinery Products Co., 4256 Wesley Terrace, Schiller Park, Illinois, 60176. Although the names of the waste hauler and the storage and treatment site were incorrectly switched in the first five manifests, the registration and identification numbers for the waste hauler and the site and identification numbers for the storage and treatment site were all entered in the correct spaces.

The information requested in question 1c. can be found in the copy of the IEPA special waste disposal application. The application, at the bottom of page 1 and top of page 2, contains the results of an analysis run by Chemical Waste Management of Illinois on the contents of the waste materials. Request is hereby made upon the Agency to consider the results of the tests confidential and entitled to protection as a trade secret.

It should also be noted that the application mentions the name of Apollo Liquid Waste as waste hauler. Appolo Waste Haulers were never used to transport our waste materials. Attached to the application is a copy of a letter sent by Precision Twist Drill to the IEPA confirming our addition of North Branch Waste to the permit.

2. Waste is sent to site and it is reclaimed. We have no knowledge of the process.

3. Refinery Products Co., 4256 Wesley Terrace, Schiller Park, Illinois. Site No. 03128502, ILD000665786. We have no knowledge of container or tank at the facility.

4. We do not receive any recycled or reclaimed products.

5. Information was from an analysis made by Chemical Waste Management as indicated on I.E.P.A. Permit attached.

6. The spent cutting oils and water solubles are used in the fluting and grinding of cutting tools. The solvents are used in a cleaning process to remove oil residue. All are the result of manufacturing high speed cutting tools.

7. We have no knowledge of the storage, reclamation, recycling, or reuse of the waste, nor do we have any knowledge of whether the material is stored before or after processing and for how long a period, if any.

If I can be of any further assitance, please do not hesitate to contact me.

Very truly yours,

Clarence W. Matz

Clarence W. Matz
Executive Vice President/Manufacturing

SUBSCRIBED and SWORN to
before me this 25TH day
of March, 1981.

Notary Public

/mcp

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST
WASTE GENERATOR

Authorization Number 998226

Precision Twist Drill Co. (Company Name) 901 Industrial Av (Address)
Crystal Lake (City) IL (State) 60014 (Zip)
ILD005076567
1110050004 (Generator Number)

WASTE HAULER(S)

(1) Refinery Prod. Co (Hauler Name) P.O. Box 1660 Des Plaines IL 60018 (Hauler Address) S.W.H. Registration Number 0204005
ILD093161495

(2) (Hauler Name) (Hauler Address) S.W.H. Registration Number

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

North Branch Waste Oil (Facility Name) P.O. Box 1660 (Address)
Des Plaines (City) IL (State) 60 (Zip)
03128502 (Site Number)
ILD000665786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: Oil & Water

WASTE PHASE: Liquid (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION:

HAZARD CLASS: Toxic

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 11/4/80

E.F. Pettis (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2300 (47–52) (1 GALLONS / 2 CU. YDS.) (Circle One) 1 (53)

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) [signature] (Authorized Signature) DATE: 11 04 80 (54–59)

(2) _____ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

[signature] (Authorized Signature) DATE: 11 04 80 (60–65)

COMMENTS OR SPECIAL INSTRUCTIONS: Reclamation

IN ILLINOIS: 217 / 782-3637 OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

Authorization Number 998726

WASTE GENERATOR

PRECISION TWIST DRILL CO. (Company Name) 301 Industrial AV (Address)
CRYSTAL LAKE (City) IL. (State) 60014 (Zip)
ILD005076567
1110050004 (Generator Number)

WASTE HAULER(S)

(1) REFINERY Prod. CO. (Hauler Name) P.O. BOX 1660 DES PLAINES IL, 60018 (Hauler Address) S.W.H. Registration Number 0204005
ILD093161495

(2) _____ (Hauler Name) _____ (Hauler Address) S.W.H. Registration Number _____

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

NORTH BRANCH WASTE OIL (Facility Name) PO. BOX 1660 (Address)
DES PLAINES (City) IL. (State) 60 (Zip)
03128502 (Site Number)
ILD000665786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: OIL

WASTE PHASE: Liquid (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW.

SHIPPING DESCRIPTION: _____

HAZARD CLASS: TOXIC

_____ _____

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 11-24-80 L. J. Alap (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2300 (1 GALLONS / 2 CU. YDS.) (Circle One) 1

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED.

(1) X _____ (Authorized Signature) DATE 11/24/80

(2) _____ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

Thomas Kent (Authorized Signature) DATE 11-24-80

COMMENTS OR SPECIAL INSTRUCTIONS: _____

IN ILLINOIS: 217 / 782-3637 OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

WASTE GENERATOR

Authorization Number 4 7 5 2 3 5 (8–13)

ILD005076567

(Company Name) (Address)

(City) (State) (Zip)

(14–24) Generator Number

WASTE HAULER(S)

(1) (Hauler Name) (Hauler Address) S.W.H. Registration Number (25–31)

ILD093161495

(2) (Hauler Name) (Hauler Address) S.W.H. Registration Number (32–38)

DESTINATION – DISPOSAL STORAGE OR TREATMENT SITE

(Facility Name) (Address)

(City) (State) (Zip)

(39–46) Site Number

ILD000665786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: Oil & Waste

WASTE PHASE: Liquid
(Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION:

HAZARD CLASS:

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE:

(Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: Truck (47–52)

1 GALLONS 2 CU. YDS. (Circle One) 1 (53)

METHOD OF SHIPMENT (Circle One) DRUMS TANK TRUCK OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) (Authorized Signature) DATE: 12/15/88 (54–59)

(2) (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED.

(Authorized Signature) DATE: 12/15/88 (60–65)

COMMENTS OR SPECIAL INSTRUCTIONS: Reclamation

IN ILLINOIS: 217 / 782-3637 OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

WASTE GENERATOR

Authorization Number 995726

Precision Twist Drill Co. (Company Name) 201 Industrial Av (Address)
Crystal Lake (City) IL (State) (Zip)
ILD005076567 (Generator Number)

WASTE HAULER(S)

(1) Refinery Proc Co (Hauler Name) P.O. Box 1660, Des Plaines IL 60018 (Hauler Address)
S.W.H. Registration Number 02040805
ILD093161495

(2) (Hauler Name) (Hauler Address)
S.W.H. Registration Number

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

North Branch Waste Oil (Facility Name) P.O. Box 1660 (Address)
Des Plaines (City) IL (State) 60018 (Zip)
021250 2 (Site Number)
ILD000665786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: Oil & Water
WASTE PHASE: Liquid (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION:
HAZARD CLASS: Toxic

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 1-8-81
E. F. Ritz (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 1600 (1 GALLONS / 2 CU. YDS.) (Circle One) 1

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) _____ (Authorized Signature) DATE: 01 08 81

(2) _____ (Authorized Signature) DATE: 01 08 81

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

Thomas Hart (Authorized Signature) DATE: 01 08 81

COMMENTS OR SPECIAL INSTRUCTIONS:

IN ILLINOIS: 217 / 782-3637 — 24 HOUR EMERGENCY NUMBER — OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

~~TO BE~~ COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

WASTE GENERATOR

Authorization Number 998726

PRECISION TWIST DRILL CO — Company Name
301 INDUSTRIAL AV — Address
CRYSTAL LAKE — City
IL — State
60014 — Zip

ILD005076567
ILL0050004 — Generator Number

WASTE HAULER(S)

(1) REFINERY PROD CO — Hauler Name
P.O. Box 1660 DES PLAINES, IL. 60018 — Hauler Address
S.W.H. Registration Number 0201005
ILD093161495

(2) _____ — Hauler Name
_____ — Hauler Address
S.W.H. Registration Number _____

DESTINATION -- DISPOSAL STORAGE OR TREATMENT SITE

NORTH BRANCH WASTE OIL — Facility Name
P.O. Box 1660 — Address
DES PLAINES — City
IL — State
60018 — Zip

ILD000665786
03128502 — Site Number

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: OIL & WATER

WASTE PHASE: LIQUID (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION:

HAZARD CLASS: TOXIC

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 1/13/81

E. F. Pettle
(Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2300 (GALLONS / CU. YDS.) (Circle One) 1

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) Gary Tuck (Authorized Signature) JAN 16 1981 DATE: 01 13 81

(2) _____ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

(Authorized Signature) DATE: 01 13 81

COMMENTS OR SPECIAL INSTRUCTIONS: _____

IN ILLINOIS: 217 / 782-3637 — OUTSIDE ILLINOIS 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

WASTE GENERATOR

Authorization Number 998726

PRECISION TWIST DRILL Co (Company Name) 901 INDUSTRIAL AV Address

ILD005076567

CRYSTAL LAKE City IL State 60014 Zip

1110050004 Generator Number

WASTE HAULER(S)

(1) NORTH BRANCH WASTE OIL Hauler Name P.O. Box 1660 DES PLAINES IL 60018 Hauler Address S.W.H. Registration Number 0207005

ILD093161495

(2) _____ Hauler Name _____ Hauler Address S.W.H. Registration Number _____

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

REFINERY PROD. Co (Facility Name) 4256 WESLEY TERRACE Address 0312850 2 Site Number

SCHILLER PARK City IL State 60176 Zip ILD 000665786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: OIL & WATER

WASTE PHASE: LIQUID (Liquid, Gaseous, Solid)

FEB 17 1981

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION: Tanker

HAZARD CLASS: Toxic

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 2/9/81

E. F. Pistle (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2300 (47–52) (1) GALLONS (2) CU. YDS. (Circle One) (53)

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

FEB 16 1981

(1) Harry Zed (Authorized Signature) DATE: 02 09 81 (54)

(2) _____ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

_____ (Authorized Signature) DATE: 02 09 81 (60–65)

COMMENTS OR SPECIAL INSTRUCTIONS: _____

IN ILLINOIS: 217 / 782-3637 OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

WASTE GENERATOR

Authorization Number 498726

Precision Twist Drill Co (Company Name) | 301 Industrial Av (Address)
ILD005076567

Crystal Lake (City) | IL (State) | 60014 (Zip)
IL1OD500074 (Generator Number)

WASTE HAULER(S)

(1) North Branch Waste Oil (Hauler Name) | P.O. Box 1660 Des Plaines IL 60018 (Hauler Address) | S.W.H. Registration Number 020H003
ILD093161495

(2) _____ (Hauler Name) | _____ (Hauler Address) | S.W.H. Registration Number _____

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

Refinery Prod. Co (Facility Name) | 4256 Wesley Terrace (Address) | 03128502 (Site Number)
Schiller Park (City) | IL (State) | 60176 (Zip)
ILD000645756

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: Oil & Water

WASTE PHASE: Liquid (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION: Tanker

HAZARD CLASS: Toxic

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 2/20/81

O. F. Pittle (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2100 (1) GALLONS (2) CU. YDS. (Circle One)

METHOD OF SHIPMENT (Circle One) DRUMS (TANK TRUCK) OPEN TRUCK OTHER _____ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) _____ (Authorized Signature) DATE: ___/___/___

(2) _____ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

_____ (Authorized Signature) DATE: 02/20/81

COMMENTS OR SPECIAL INSTRUCTIONS: _____

IN ILLINOIS: 217 / 782-3637 — IN CASE OF EMERGENCY AND TO BE FILED WITHIN 7 HOURS — OUTSIDE ILLINOIS: 800 / 424-8802

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 SITE PART - 4 HAULER PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

TO BE COMPLETED BY WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
SPECIAL WASTE HAULING MANIFEST

Authorization Number 795891

ILD005076567

111 305 0008

Generator Number

WASTE GENERATOR

Precision Twist Drill 301 Industrial Av.
(Company Name) Address

Crystal Lake | IL | 60014
City | State | Zip

WASTE HAULER(S)

(1) North Branch Waste Oil P.O. Box 1660 Des Plaines IL 60018
Hauler Name | Hauler Address

S.W.H. Registration Number 6204005

IL0093161495

(2) ________ Hauler Name ________ Hauler Address

S.W.H. Registration Number ________

DESTINATION -- DISPOSAL STORAGE OR TREATMENT SITE

Refinery Prod Co. 4856 Wesley Terrace
(Facility Name) Address

Schiller Park | IL | 60176
City | State | Zip

Site Number 0310050008

ILD 000 66 5786

TO BE COMPLETED BY WASTE GENERATOR

WASTE NAME: Oil & Water

WASTE PHASE: Liquid (Liquid, Gaseous, Solid)

THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW:

SHIPPING DESCRIPTION: Tanker

HAZARD CLASS: Toxic

MAR 4 1981

THIS IS TO CERTIFY THAT THE ABOVE-NAMED SPECIAL WASTE IS PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

DATE: 3/2/81

[signature] (Authorized Signature)

WASTE HAULER*

QUANTITY OF WASTE RECEIVED: 2900

1 GALLONS
2 CU. YDS. (Circle One) 1

METHOD OF SHIPMENT (Circle One) DRUMS TANK TRUCK OPEN TRUCK OTHER ________ (Specify)

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED.

(1) [signature] (Authorized Signature) DATE: 03/02/81

(2) ________ (Authorized Signature) DATE: ___/___/___

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED SPECIAL WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED:

[signature] (Authorized Signature) DATE: 03/03/81

COMMENTS OR SPECIAL INSTRUCTIONS: ________

IN ILLINOIS: 217/782-3637 OUTSIDE ILLINOIS: 800/424-8802

DISTRIBUTION: PART 1 GENERATOR PART 2 IEPA PART 3 SITE PART 4 HAULER PART 5 IEPA PART 6 GENERATOR

GENERATOR COPY — PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

CWM # 3430

PERMIT ISSUED
1979

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
SPECIAL WASTE DISPOSAL APPLICATION

CARD TYPE | DATE 12/10/79 | L P S W C | AUTHORIZATION NUMBER 7930Z3 | TRANS CODE | DATE ENTERED (Agency Use) 12/12/79

WASTE HAULER

HAULER REGISTRATION NUMBER 0116 | NAME APOLLO LIQUID WASTE
ADDRESS 1715 ROCKLAND ROAD | COMMUNITY LAKE BLUFF
COUNTY LAKE | STATE ILL. | ZIP 60044 | AREA CODE 312 | TELEPHONE 680 7210

WASTE GENERATOR

GENERATOR CODE 1112045CCCCG | NAME PRECISION TWIST & DRILL CO.
ADDRESS 301 INDUSTRIAL AVENUE | COMMUNITY CRYSTAL LAKE
COUNTY MCHENRY | STATE ILL. | ZIP 60014 | AREA CODE 815 | TELEPHONE 459 2040
GENERATOR CONTACT NAME EARL OERTLE
DUNS NUMBER | SIC CODE 3541
PROCESS NAME GRIND OF DRILL BITS

WASTE CHARACTERISTICS

GENERIC WASTE NAME WASTE WATER, OIL & SOLVENT
IUPAC WASTE NAME
TOTAL ANNUAL WASTE VOLUME 48000 | VOLUME UNITS 2 | WASTE PHASE 3
TRANSPORT FREQUENCY 5 | WASTE CLASS (Agency Use)

1 = CUBIC YARDS
2 = GALLONS

1 = SOLID
2 = SEMI-SOLID
3 = LIQUID
4 = GAS

1 = ONE TIME
2 = DAILY
3 = WEEKLY
4 = BI-WEEKLY
5 = MONTHLY
6 = BI-MONTHLY
7 = QUARTERLY
8 = SEMI-ANNUALLY

(Code either "1" for Low, "2" for Medium, or "3" for High as appropriate for columns 21 through 26):

INHALATION TOXICITY 1 | DERMAL TOXICITY 1 | INGESTIVE TOXICITY 2 | INFECTIOUS | REACTIVITY | EXPLOSIVE
FLASH POINT 200 °F | ALPHA RADIATION (pCi/L) | COMPOSITION 1

1 = ORGANIC
2 = INORGANIC

PERCENT ACIDITY . | PERCENT ALKALINITY . | pH . | PERCENT TOTAL SOLIDS 70.90 | PERCENT ASH CONTENT 0.81

KEY COMPONENT NAME	PERCENT	KEY COMPONENT NAME	PERCENT
1 SOLVENT AND WATER	29.1	2 OILS	70.1
3 INORGANIC SALTS	0.8	4	
5		6	

RECEIVED
DEC 12 1979
E.P.A. - D.L.P.C.
ILLINOIS

CONFIDENTIAL INFORMATION

This document shall not be reproduced, copied, loaned or disposed of directly or indirectly, in whole or in part, nor used for any purpose other than for which it is specifically submitted without the prior written consent of

CARD TYPE | DATE 12/10/79 | L P S M C | AUTHORIZATION NUMBER | TRANS CODE | DATE ENTERED (Agency Use)

WASTE CHARACTERISTICS

7 0	METAL	KEY	TOTAL (PPM)	LEACH (PPM)	METAL	KEY	TOTAL (PPM)	LEACH (PPM)
	CN	01			Cu	02	5.3	
	Ag	03			Hg	04		
	As	05	0.1		Ni	06	3.0	
	Ba	07			Pb	08	1.3	
	Cd	09	0.1		Se	10		
	Cr	11	42.6		Zn	12	11.2	

8 0 LABORATORY NAME Chemical Waste Management of Illinois

CERTIFICATION NUMBER | REVIEWED BY: K. Thomas E. Cavanagh Jr.

9 0 1 SITE CODE 0 3 1 2 1 0 0 1 | SITE NAME Dorsey Rd/Lake

DISPOSAL METHOD 01 | NEUTRALIZATION METHOD

STATUS A | START DATE 01/02/80 | EXPIRATION DATE 01/02/81

SIGNATURE _____ (SITE OWNER) | SIGNATURE _____ (SITE OPERATOR)

2 SITE CODE 0 3 1 2 8 5 0 2 | SITE NAME ~~Refinery Ponds~~ North Branch Waste Oil - Des Plaines

DISPOSAL METHOD | NEUTRALIZATION METHOD

STATUS | START DATE | EXPIRATION DATE

SIGNATURE _____ (SITE OWNER) | SIGNATURE _____ (SITE OPERATOR)

3 SITE CODE | SITE NAME

DISPOSAL METHOD | NEUTRALIZATION METHOD

STATUS | START DATE | EXPIRATION DATE

SIGNATURE _____ (SITE OWNER) | SIGNATURE _____ (SITE OPERATOR)

4 SITE CODE | SITE NAME

DISPOSAL METHOD | NEUTRALIZATION METHOD

STATUS | START DATE | EXPIRATION DATE

SIGNATURE _____ (SITE OWNER) | SIGNATURE _____ (SITE OPERATOR)

5 SITE CODE | SITE NAME

DISPOSAL METHOD | NEUTRALIZATION METHOD

STATUS | START DATE | EXPIRATION DATE

SIGNATURE _____ (SITE OWNER) | SIGNATURE _____ (SITE OPERATOR)

301 INDUSTRIAL AVE. • CRYSTAL LAKE, ILLINOIS 60014 • PHONE AREA 815 459-2040 • TWX: 910-634-3352

PRECISION TWIST DRILL AND MACHINE CO.

July 30, 1980

Mr. Wally El-Beck
Illinois Environmental Protection Agency
Land Permit Section
2200 Churchill Road
Springfield, IL 62706

Dear Wally:

To confirm our telephone conversation of July 30, 1980.

We discussed my adding an additional waste hauler and disposal site.

The hauler will be North Branch Waste Hauler, P.O. Box 1660, Des Plaines, IL 60018. Their hauler registration is 0204. The site will be Refinery Products, P.O. Box 1660, Des Plaines, IL 60018. The site code is 05128502.

My authorization is 793073 and generator code 1110050004.

Yours truly,

PRECISION TWIST DRILL AND MACHINE CO.

E. F. Pertle

E.F. Pertle
Safety Engineer

bh

mutnan

No. 449506

5 WHITE

RECEIPT FOR CERTIFIED MAIL

SENT TO
James H. Beck, President
Precision Twist Drill
and Machine Company
STREET AND NO.
301 Industrial Avenue
P.O., STATE AND ZIP CODE
Crystal Lake, Illinois 60014

POSTMARK OR DATE

MAR 2 1981 CHICAGO, ILL.

OPTIONAL SERVICES FOR ADDITIONAL FEES

RETURN RECEIPT SERVICES
1. Shows to whom and date delivered ..... 35¢
With restricted delivery ..... 35¢
2. Shows to whom, date and where delivered ..... 60¢
With restricted delivery ..... 60¢

RESTRICTED DELIVERY ..... 50¢

SPECIAL DELIVERY (extra fee required) .....

CONSULT POSTMASTER FOR FEES

PS Form Jan. 1976 3800

NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL

(See other side)

☆ GPO: 1975—O-591-452

PS Form 3811, Apr. 1977 RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one).
☐ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
☐ RESTRICTED DELIVERY
Show to whom and date delivered ..... ¢
☐ RESTRICTED DELIVERY
Show to whom, date, and address of delivery . $
(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
James H. Beck, President
Precision Twist Drill
and Machine Company
301 Industrial Avenue
Crystal Lake, Illinois 60014

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	449506	

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☒ Authorized agent

Beck

4. DATE OF DELIVERY 3/4/81 POSTMARK

MAR 4 1981 CHICAGO, ILL.

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

☆GPO: 1977—0—249-595

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James H. Beck, President
Precision Twist Drill
and Machine Company
301 Industrial Avenue
Crystal Lake, Illinois 60014

FEB 2 7 1981

Re: Information Request
Pursuant to Section 3007 (RCRA)
Precision Twist Drill
and Machine Company
Crystal Lake, Illinois

Dear Mr. Beck:

Under Section 3007 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6927, the United States Environmental Protection Agency (U.S. EPA) may request certain information concerning solid and hazardous waste management and disposal.

Pursuant to the authority provided by Section 3007 of the RCRA, it is formally requested that you furnish U.S. EPA, Region V, with the information identified in the enclosed information request.

In completing the enclosed information request, you should be aware that the written statements submitted pursuant to this request must be submitted under an authorized notarized signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Moreover, any documents submitted to Region V pursuant to this information request must be certified as being true and authentic to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submittal of the requested information, that any portion of the submitted information is false or inaccurate, the signatory should so notify Region V. If any answer certified as true should be later found to be untrue, the signatory could be prosecuted pursuant to 18 U.S.C. Section 1001.

If you have any questions concerning this matter, please contact Mr. Larry Kyte, an attorney on my staff at (312) 353-2094 or Mr. Michael Mutnan, an engineer on my staff at (312) 353-2110, respectively.

Very truly yours,

ORIGINAL SIGNED BY
DALE S. BRYSON

Sandra S. Gardebring
Director, Enforcement Division

Enclosure

cc: Jack Moore, Manager
Hazardous Waste Program
Illinois Environmental Protection Agency

bcc: ~~Donaldson/David N. Lyons, Chief~~
LEDER ~~Compliance Branch~~
~~Office of Water Enforcement, EN-338~~

MSM 2/18/81

MUTNAN:srj 2-18-81 6-6770

MUNO WEM 2/19/81

MINER WHM 2/20/81

LEDER BL 2/23/81

KYTE ZK 2/23

GROMNICKI JES

FENNER RWL 2/24

BRYSON DM

GARDEBRING

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	REQUEST PURSUANT TO SECTIONS 3007 OF THE RESOURCE CONSERVATION AND RECOVERY ACT, 42 U.S.C. 6927
PRECISION TWIST DRILL AND MACHINE COMPANY	)	
CRYSTAL LAKE, ILLINOIS	)	

The following request for information is made by the United States Environmental Protection Agency (U.S. EPA), Region V, pursuant to Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. Section 6927. This request pertains to solid wastes which may be considered hazardous under Subtitle C of RCRA, 42 U.S.C. Section 6921 et seq., and which were delivered to Qu Voe Chemical Industries, Inc., (Qu Voe) at either its 2323 Mount Prospect Road, Des Plaines, Illinois or 4256 Weseley Terrace, Schiller Park, Illinois places of business. Within 21 days following receipt of this request, Precision Twist Drill and Machine Company shall provide the U.S. EPA with the following requested information.

For the purpose of this request the term "solid waste" shall be defined as any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or any pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities.

1. Describe all solid waste which the Company transported or offered for transport from any of its facilities to either of Qu Voe's places of business since November 19, 1980. Such description for each shipment shall include:

   a. The name of the transporter, the vehicle driver, the transporter's address and the transporter's U.S. EPA identification number.

   b. The quantity of solid waste transported in each shipment.

c. A description of the solid waste transported or offered for transport. This should include all results of testing done on the solid waste to determine its characteristics. If it is a listed solid waste under Subpart D of 40 CFR 261, or if it displays characteristics of hazardous wastes under Subpart C of 40 CFR 261.21 through 261.24, specify the properties which cause the solid waste to be listed or characterized as a hazardous waste under those parts. For solid wastes identified under Subpart D of 40 CFR §§261.30 through 261.33 specify the industry and EPA Hazardous Waste number found in the lists which corresponds to the description of the solid waste.

d. The date the solid waste was transported.

2. Describe the purpose for which the solid waste was sent to Qu Voe (reclamation, recycling, storage, treatment or disposal, etc.) and the process which Qu Voe uses as you understand it.

3. Designate the Qu Voe facility which received each waste and if known the container or tank at the facility which received the waste.

4. Describe any recycled or reclaimed products you receive from Qu Voe, such as solvents. The description should include whether the products contain any chemicals listed in 40 CFR §261.33. Include the Hazardous Waste number for the chemical found in the lists of 40 CFR §261.33. Also include the date the product was received and the quantity.

5. Describe the methods or information upon which you base your determinations and answers concerning the characteristics or listing of the solid wastes or products described in your answers to the above questions. Also include all test results.

6. Describe the process which produces the solid waste sent to Qu Voe. Also, describe the process which utilizes any product received from Qu Voe.

7. Describe any other information received from Qu Voe officials employees or the transporter concerning the storage, reclamation, recycling or reuse of solid wastes from your facilities. Specifically, are you aware if any of your solid wastes sent to Qu Voe are stored, for how long and if the wastes are stored before or after processing?

The information requested herein must be provided not withstanding its possible characterazation as confidential information or trade secrets. Should you so request, however, any information (other than public information) which the Administrator of this Agency determines to constitute methods, processes or other business information entitled to protection as trade secrets will be maintained as confidential or a trade secret. A request for confidential treatment must be made when the information is provided, since any information not so identified will not be accorded this protection by the Agency.

The written statements submitted pursuant to this request must be notarized and returned under an authorize signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Moreover, any documents submitted to Region V pursuant to this information request should be certified as authentic to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submittal of the requested information, that any portion of this submission certified as true is false or incorrect, the signatory should so notify Region V. If any answer certified as true is found to be untrue, the signatory can be prosecuted under 18 U.S.C. 1001.

Please submit your response within the designated time period to the Director, Enforcement Division, United States Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, Attention: Compliance Section.

Signed this 27th day of February, 1981

Dale S Bryson

for Sandra S. Gardebring
Director, Enforcement Division
U.S. Environmental Protection Agency
Region V

Date: 01/09/81

Referral Number: ILH-81-24

Region V Site No: ILD005076567

HAZARDOUS WASTE REFERRAL

Contacts

Ralph Feeney
Compliance Section

Engineering Section

Legal Section

Site Name: Precision Twist Drill and Machine Company

Site Location: 301 Industrial Avenue
Crystal Lake, Illinois

Owner/Operator:

Permitted Site:

Permit Number & Issue Date (if applicable):

Apparent Violations:

Manifest numbers 017359 and 017360 listed the waste as oil [illegible] liquid phase and bearing a hazard class of toxic. The designated facility on these two manifests did not have a location address as required by 40 C.F.R. 262.21(a)

List Supporting Documentation
(MDR's, Letters, Reports, Phone Memos, Field Surveys, Photographs, etc.)

List Previous violations and subsequent action taken:

Compliance Section Recommendations:

Refer for Compliance Order.

Technical Evaluation and Action Development
(To be filled out by Engineering Section)

Date Received: _____

Assigned to: _____

Date Evaluation and Action Development to be Completed: _____

Additional Contacts/Documentation Developed (including phone memos to or from permittee and to or from State):

Engineering Section Recommendation:

No action waste exempt

Specify, Develop and Attach Action Documents:
(including cover memos)

Legal Evaluation
(To be filled out by Legal Section)

Date Received: _____

Assigned to: _____

Date Review to be Completed: _____

Additional Contacts/Documentation Developed
(including phone memos to or from permittee and to or from State):

Legal Section Recommendation:

The waste does not appear to be a listed waste if it is reclaimed. It is exempt under 40 CFR 261.6. no evidence not reclaimed

No action

REMARKS
(To be filled out as appropriate)

ACTION INITIATED
(To be filled out by Compliance Section)

TYPE OF ACTION: _____

Date INITIATED: _____

DATE CLOSED OUT: _____

D.Corrective Action

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

April 21, 1993

Mr. Chuck Mullen
Corporate Safety Director
Precision Twist Drill Company
301 Industrial Avenue
Crystal Lake, Illinois 60014

Re: Visual Site Inspection
Precision Twist Drill Company
Crystal Lake, Illinois
ILD 005 076 567

Dear Mr. Mullen:

The U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

PRECISION TWIST DRILL COMPANY CRYSTAL LAKE, ILLINOIS ILD 005 076 567

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

Work Assignment No.	:	C05087
EPA Region	:	5
Site No.	:	ILD 005 076 567
Date Prepared	:	March 2, 1993
Contract No.	:	68-W9-0006
PRC No.	:	009-C05087-IL6K
Prepared by	:	Resource Applications, Inc. (Michael W. Gorman)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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EXECUTIVE SUMMARY

Resource Applications, Inc. (RAI), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Precision Twist Drill Company (Precision) facility in Crystal Lake, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

Precision manufactures various size drill bits, primarily for large industrial users. Steel bars are the primary raw material used to manufacture drill bits. The bars are cut to specified sizes, bases are welded to the bits, the bits are then machined to form the bits' grooves. The drill bits are cleaned in trichloroethene (TCE) degreasers and heat treated in a barium solution before the final cutting and grinding is applied. Precision generates spent TCE (F001), barium washwater (D005), and barium solids (D005). The grinding and cutting operations also generate nonhazardous cutting oil, coolant oil, welding particulates, and carbide sludge.

Precision began operations in 1965 and currently employs 650 people, working 24 hours per day, 7 days per week. The land was owned by Mathew Farm Machinery from 1954 to 1965. Prior to 1954 the area was agricultural land.

Precision filed a RCRA Part A permit application on November 17, 1980, for a 275-gallon capacity container storage area (S01); a 3,200-gallon capacity container storage area (S01); a 92-gallon container storage area (S01), a 220-gallon container storage area (S01), a 3,273-gallon capacity storage tank (S02), a 6,000-gallon capacity storage tank (S02), and a 3,000-cubic-yard capacity waste pile (S03). According to Precision, the only units which managed hazardous wastes were the Barium Washwater Tank (SWMU 1), the 6,000-gallon capacity S02 unit listed above, and the Barium Drum Storage Area (SWMU 2), the 3,200-gallon capacity S01 unit listed above. Because the remaining units either never managed wastes or managed only nonhazardous wastes, the units were incorrectly identified on Precision's Part A permit application. The facility submitted an amended RCRA Part A

permit application on January 20, 1992, to correct inaccurate capacities and process codes put on the 1980 application. The corrections were requested by the Illinois Environmental Protection Agency (IEPA), in order to explain several inadequacies identified in an October 1991 closure plan. The October 1991 closure plan only addressed the Barium Washwater Tank (SWMU 1), the 6,000-gallon capacity (S02) process code listed above, and the Barium Drum Storage Area (SWMU 2), the 3,200-gallon capacity (S02) process code listed above. In a July 1991 letter to IEPA, Precision representatives stated that the original Part A permit application was incorrect with regards to capacities and process codes, and that the only units that ever managed RCRA wastes were SWMUs 1 and 2. The 1992 amended Part A listed a 3,300-gallon capacity container storage area (S01) (SWMU 2) and a 5,000-gallon capacity storage tank (S01) (SWMU 1) only. Precision submitted a revised closure plan for SWMUs 1 and 2 on February 20, 1992. The revised plan was approved by IEPA on April 23, 1992. Precision is in the process of closing SWMUs 1 and 2; closure must be complete by December 1, 1992. Precision is still regulated as a generator and treatment, storage, or disposal facility.

The PA/VSI identified the following 14 SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Barium Washwater Tank
2. Barium Drum Storage Area
3. Satellite Accumulation Areas
4. TCE Drum Storage Area
5. Waste Cutting Oil and Coolant Oil Collection Areas
6. Waste Cutting Oil and Coolant Oil Tanks
7. Waste Coolant Oil UST
8. Oil Dry Dumpster
9. Carbide Sludge Collection System
10. Nonhazardous Waste Drum Storage Area
11. Welding Particulate Baghouse
12. Nonhazardous Waste Dumpster
13. Soil Vapor Extraction System
14. Proposed Ground Water Remediation System

Area of Concern

1. Fuel Oil UST

There have been three documented releases to environmental media at the Precision facility. Frink's Industrial Waste, Inc. (FIW), was contracted by Precision in January 1988 to remove a Waste Coolant Oil UST (SWMU 7), located on the west side of Building 1, and Fuel Oil UST (AOC 1), located on the east side of Building 1. The Waste Coolant Oil UST (SWMU 7) was cleaned and closed-in-place and the Fuel Oil UST (AOC 1) was cleaned and removed. However, volatile organic compounds (VOCs) were detected in the soil and ground water around SWMU 7 and in the soil around AOC 1. According to facility representatives, SWMU 7 only managed nonhazardous waste coolant oil. Precision contracted Maecorp, Inc. (Maecorp) to remediate the contaminated soil and ground water. Maecorp has installed a Soil Vapor Extraction System (SWMU 13) to remediate contaminated soil around SWMU 7. Contamination leached into the ground water, which flows from east to west. VOC-contaminated ground water has been encountered at the extreme western edge of the facility's property. A Proposed Ground Water Remediation System (SWMU 14) will treat the contaminated ground water prior to discharge to the City of Crystal Lake Sewer System under a yet to be obtained permit from the City of Crystal Lake. There is no plan set up to remediate the contaminated soil around AOC 1. During closure of SWMU 2, barium-contaminated soil was detected. Precision will remediate the soil as part of its RCRA closure of the unit.

Because SWMU 7 is inactive, potential for future release to ground water, surface water, air, or on-site soils is low, after the soil and ground water are remediated. Potential for release to ground water is high from AOC 1. Ground water can be encountered at a depth of 15 feet below ground surface, so it is likely that contamination entered this medium. Like SWMU 7, once remediation is complete around AOC 1, potential for release to environmental media will be low. After closure and remediation of the soil around SWMU 2, a new concrete pad will be poured. Potential for release to environmental media will be low from SWMU 2 because wastes will be managed in steel drums, stored on top of a newly poured concrete pad, for less than 90 days. Potential for release to environmental media is low for the remainder of the SWMUs because all wastes are securely managed.

Precision is a 134,000-square-foot facility located in a residential area of Crystal Lake, McHenry County, Illinois. Crystal Lake has a population of approximately 18,000 people. The facility is bordered on the south and west by residences, on the north by an industrial facility (Mathew Farm Machinery), and on the east by a 30-acre palustrine, emergent seasonally-flooded

wetland. An 80-acre palustrine, emergent seasonally-flooded wetland is located approximately 1 mile north of the facility. The nearest surface water body is Veteran's Acres Park Lake, located 0.5 mile west of the facility and used for recreational purposes. The closest house is 50 feet south of the facility and the closest school is Central School, 0.75 mile southwest of the facility. The facility is not fenced; but security guards are on site.

The City of Crystal Lake and the facility receive water from ground water sources. Ground water, which flows in an east to west direction, can be reached at a depth of 15 feet, but most wells are at a depth of 245 feet. The closest private well is located 400 feet south of the facility. The closest municipal well is 2,000 feet south of the facility. The closest well downgradient from Precision is a private well located approximately 3,000 feet to the west.

RAI recommends that the facility continue with the closure of SWMUs 1 and 2 as scheduled as well as the remediation of soil and ground water near SWMU 7 and the soil contamination at SWMU 2. RAI also recommends conducting soil and ground water analysis around AOC 1 to define and characterize the contaminants. RAI recommends no further action for the remaining SWMUs.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC) received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. Resource Applications, Inc. (RAI), TES 9 team member, provided the necessary assistance to complete the PA/VSI activities for the Precision Twist Drill Company (Precision) in Crystal Lake, Illinois.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Precision facility (EPA Identification No. ILD 005 076 567) in Crystal Lake, Illinois. The PA was completed on June 10, 1992. RAI gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA) and from EPA Region 5 RCRA files. RAI also reviewed relevant publications from the U.S. Geological Survey (USGS), Illinois Geological Survey (IGS), Federal Emergency Management Agency (FEMA), and the U.S. Department of the Interior (USDI). The VSI was conducted on June 11, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. RAI identified 14 SWMUs and 1 AOC at the facility.

RAI completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included as attachment A. The VSI is summarized and 17 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C. IEPA soil cleanup objectives for contamination at the Barium Drum Storage Area (SWMU 2) is included as Attachment D. Attachment E includes the soil and ground water clean up objectives set by IEPA for the Waste Coolant UST (SWMU 7).

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history, environmental setting; and receptors.

2.1 FACILITY LOCATION

The Precision facility is located at 301 Industrial Drive in a residential area of Crystal Lake, McHenry County, Illinois (latitude 42°15'00" N and longitude 88°18'45" W), as shown in Figure 1. Precision is bordered on the west and south by residences, on the east by a wetland, and on the north by an industrial facility. Precision is a 134,000-square-foot facility comprised of four buildings.

2.2 FACILITY OPERATIONS

The Precision facility began operations in 1965. In 1954, Mathew Farm Machinery developed the land, which was previously used for agricultural purposes and occupied the site until 1965, when it was purchased by Precision. Precision employs 650 people, and operates 24 hours per day, 7 days per week. Building 1 is used for final preparation, Building 2 is used for welding, Building 3 is used for initial cutting, and the Tungsten Solid Carbide (TSC) Building is used for carbide operations.

Precision manufactures various size drill bits marketed for industrial users. Steel bars are the primary raw material used in manufacturing drill bits. The initial process involves cutting the steel bars into specified sizes. Once the steel bars are cut, they proceed to a welding operation, where the drill bit base is added. After welding, the drill bits are formed in various types of cutting and grinding operations, where the drilling groves are cut into the bits. Cutting oil is pumped from a 50,000-gallon central oil reservoir directly to the cutting machines. Once the rough grooves are cut, the drill bits are cleaned in one of five trichloroethene (TCE) degreasers. Four of the degreasers clean with TCE vapors and one degreaser cleans by submersion. Following degreasing, the drill bits are heat treated in a series of heated barium wash tanks. The drill bits, tips, and sharp edges are then added. The final operation is a marking process, to insure that specifications are met.

ILLINOIS

QUADRANGLE LOCATION

Source: Modified from USGS, 1980

Precision Twist Drill Company Crystal Lake, Illinois
Figure 1 FACILITY LOCATION
Resource Applications, Inc.

Wastes generated from the above-mentioned operations are managed in satellite accumulation areas, drip trays, drum storage areas, aboveground tanks, dumpsters, and a baghouse.

Precision previously had two underground storage tanks (USTs). In January 1988, Frink's Industrial Waste, Inc. (FIW), Pecatonica, Illinois cleaned and removed a 7,000-gallon UST containing fuel oil and cleaned and closed-in-place a 1,500-gallon UST containing waste coolant oil. Facility representatives stated that the Waste Coolant UST (SWMU 7) contained only waste coolant oil; however, upon removal, soil contaminated with volatile organic compounds (VOCs) was detected. Contamination migrated into ground water and the facility is currently remediating both environmental media. Solid waste generated from facility operations and the SWMUs where they are managed are discussed in detail in Section 2.3.

2.3 WASTE GENERATION AND MANAGEMENT

The primary waste streams generated at the Precision facility are barium washwaters (D005), barium solids (D005), and spent TCE (F001). The facility also generates nonhazardous waste cutting oil, nonhazardous waste coolant oil, nonhazardous carbide sludge, nonhazardous baghouse dust, nonhazardous cutting particulates, and nonhazardous oil dry. The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

A barium-based solution is used to heat treat the drill bits. The bits are placed inside a wire basket and submerged into a tank of heated barium washwater for heat treating. The heat treating solution is changed monthly, generating spent barium washwater (D005). The spent barium washwater was pumped from the heat treating tank into an aboveground Barium Washwater Tank (SWMU 1) from 1964 until 1989 when the tank was removed. Since 1989, the waste has been pumped from the heat treating tank into 55-gallon drums and transferred to the Barium Drum Storage Area (SWMU 2). The spent barium washwater is picked up by Clean Harbors of Chicago, Inc. (Clean Harbors) at a rate of 9,200 gallons per year. After the drill bits are heat treated and removed from the tank, they are taken in a wire basket and placed above an open 55-gallon drum. The wire basket is shaken, and solidified waste barium solids fall off the drill bits and into the drum. The drum of spent barium solids (D005) is initially managed in a Satellite Accumulation Area (SWMU 3)

TABLE 1

SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
1	Barium Washwater Tank	Yes	Inactive, undergoing RCRA closure.
2	Barium Drum Storage Area	Yes	Active, undergoing RCRA closure as greater than 90-day storage area.
3	Satellite Accumulation Areas	No	Active.
4	TCE Drum Storage Area	No	Active, less than 90- day storage.
5	Waste Cutting Oil and Coolant Oil Collection Areas	No	Active manages nonhazardous waste.
6	Waste Cutting Oil and Coolant Oil Tanks	No	Active, manages nonhazardous waste.
7	Waste Coolant Oil UST	No	Inactive, closed-in-place in 1988.
8	Oil Dry Dumpster	No	Active, manages nonhazardous waste.
9	Carbide Sludge Collection System	No	Active, manages nonhazardous waste.
10	Nonhazardous Waste Drum Storage Area	No	Active, manages nonhazardous waste.
11	Welding Particulate Baghouse	No	Active, manages nonhazardous waste.

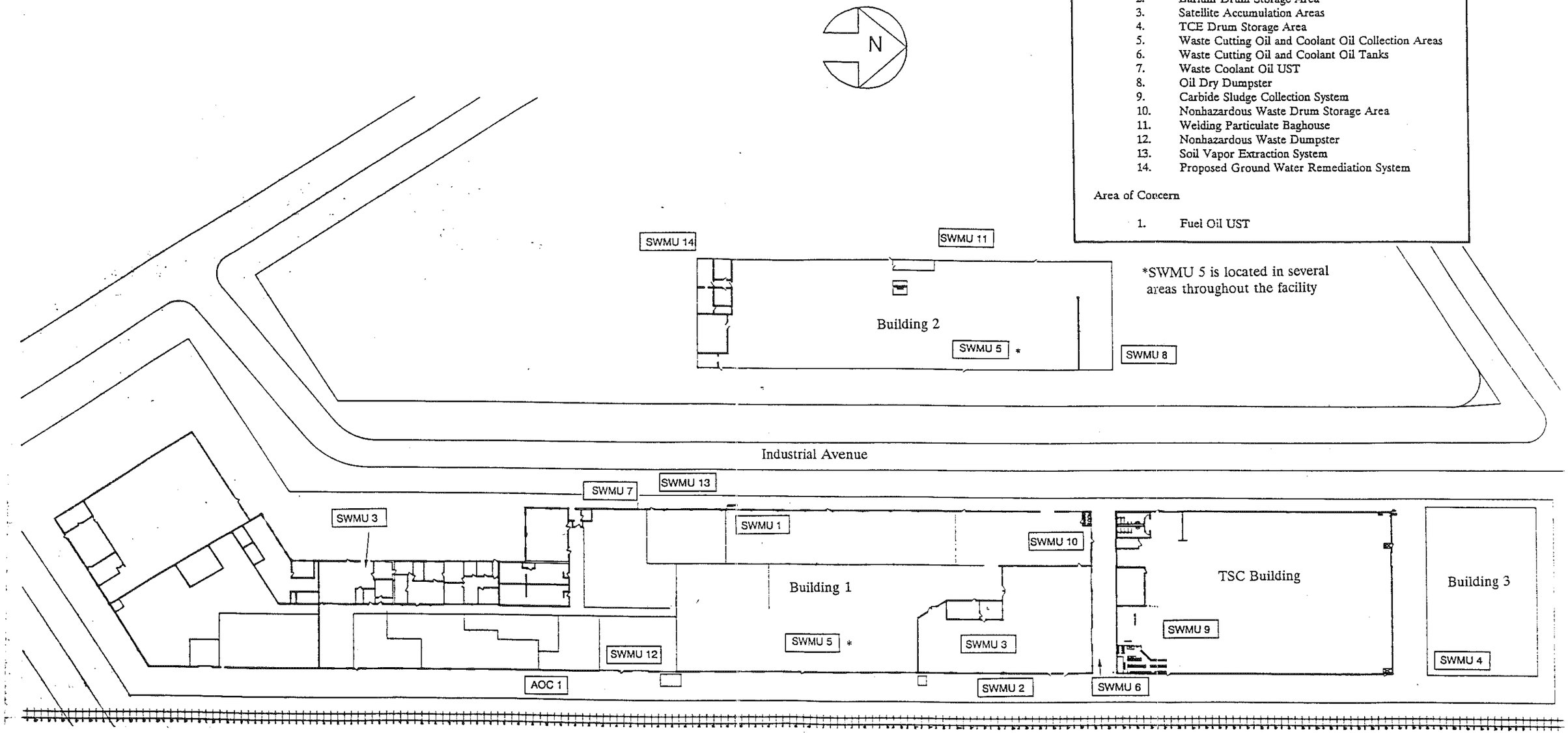
TABLE 1 (Continued)

SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
12	Nonhazardous Waste Dumpster	No	Active, manages nonhazardous waste.
13	Soil Vapor Extraction System	No	Active, treating VOC-contaminated soil.
14	Proposed Ground Water Remediation System	No	In proposal stage.

Note:

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



Precision Twist Drill Company Crystal Lake, Illinois
Figure 2 FACILITY LAYOUT
Scale: 1"=110' Source: Modified from Precision, 1992b
Resource Applications, Inc.

TABLE 2

SOLID WASTES

Waste/EPA Waste Code[a]	Source	Solid Waste Management Unit
Barium Washwater/(D005)	Heat Treating	1 and 2
Barium Solids/(D005)	Heat Treating	2 and 3
Spent TCE/(F001)	Degreasing	3 and 4
Welding Particulates/NA	Welding	11 and 12
Cutting Particulates/NA	Cutting and grinding	12
Waste Cutting Oil/NA	Cutting and grinding	5, 6, and 10
Waste Coolant Oil/NA	Cutting and grinding	5, 6, 7, and 10
Carbide Sludge/NA	Cutting and grinding	9 and 10
Oil Dry/NA	Maintenance	5 and 8
Rinse Water/NA	Closure of SWMU 2	6
VOC-Contaminated Soil	SWMU 7	13
VOC-Contaminated Ground Water	SWMU 7	14

Notes:

[a] Not applicable (NA) designates nonhazardous waste.

next to the heat treating operation. When full, the drum of waste is transferred to SWMU 2. Generated at a rate of 3,000 gallons per year, the spent barium solids (D005) are picked up by Michigan Disposal, Inc. (MDI) and landfilled at the Envirosafe Services Landfill in Oregon, Ohio.

Precision uses TCE in four vapor degreasers and one submersible degreaser. The degreasers are used to clean the drill bits prior to heat treating. The spent TCE (F001) from the bottoms of the degreasers are pumped weekly into a 55-gallon drum. The drum is managed in a Satellite Accumulation Area (SWMU 3) before transfer to the TCE Drum Storage Area (SWMU 4). Generated at a rate of 2,250 gallons per year, the spent TCE (F001) is picked up by Avganic Industries, Inc. for fuel blending.

During the welding operation, fine metal particulates are generated. The nonhazardous welding particulates are vacuumed into a 55-gallon drum at the base of a Welding Particulate Baghouse (SWMU 11). When the drum becomes full, the waste is transferred to the Nonhazardous Waste Dumpster (SWMU 12). The welding particulates are mingled with cutting oil particulates generated from the maintenance of the central oil system.

The cutting oil used in the grinding and cutting of drill bits is supplied to the machines by a central oil system. The central oil system is a 50,000-gallon closed loop system used to recirculate the large amounts of cutting oils used at the facility. The system has three filters used to collect metal particulates generated from cutting and grinding drill bits. During routine maintenance, the filters are cleaned and the nonhazardous cutting particulates are scraped into a Nonhazardous Waste Dumpster (SWMU 12). The cutting particulates are mixed with nonhazardous welding particulates in SWMU 12. The combined wastes are generated at a rate of 18,000 gallons per month and are picked up by Waste Management of McHenry County for disposal at Settlers Hill Landfill (Settlers Hill) in Batavia, Illinois.

During the various types of grinding, stamping, and cutting that are conducted at the Precision facility, cutting oils and coolant oils are used. Some machines require both cutting oil and coolant oil, some require only cutting oil, while some require only coolant oil. Nonhazardous waste cutting oil and nonhazardous waste coolant oil are collected separately in Waste Cutting Oil and Coolant Oil Collection Areas (SWMU 5), located beneath each machine. The waste cutting oil and

waste coolant oil are pumped into separate Shop-Vac vacuum systems. The wastes are then transferred in their respective shop-vacs and pumped into the Waste Cutting Oil and Coolant Oil Tanks (SWMU 6). Prior to 1978, the waste coolant oil was pumped into the Waste Coolant Oil UST (SWMU 7). Occasionally, the waste cutting oil and the waste coolant oil are pumped from the shop-vac into 55-gallon drums and managed in a Nonhazardous Waste Drum Storage Area (SWMU 10). The waste oils are then transferred from SWMU 10 to SWMU 6 via the shop-vacs.

In March 1992, Precision began producing carbide drill bits. The grinding and cutting of carbide drill bits generates fine carbide particulates. The carbide particulates are vacuumed from the machining operations by a wet vacuuming system. The wet carbide particulates form a nonhazardous carbide sludge, which is collected in a Carbide Sludge Collection System (SWMU 9). The facility recently began generating nonhazardous carbide sludge, so a generation rate is not yet available. When the reservoir becomes full of carbide sludge, the waste is scraped out and placed in 55-gallon drums and managed in SWMU 10.

Oil dry is used to clean up excess oil around the cutting and grinding machines. The oil dry is scooped up and placed inside 55-gallon drums and initially managed in Waste Cutting Oil and Coolant Oil Collection Areas (SWMU 5). Precision employees routinely take the 55-gallon drums of oil dry from SWMU 5 and dump the contents into the Oil Dry Dumpster (SWMU 8). Generated at a rate of 31,000 gallons per year, the waste is landfilled at Settlers Hill.

During the closure of SWMU 2, nine drums of nonhazardous rinse water were generated from cleaning the concrete pad. The drums were transferred to SWMU 6 and will be sent off site when closure is complete.

In January 1988, during the decommissioning of the Waste Coolant Oil UST (SWMU 7) by FIW, VOC-contaminated soil and ground water were discovered. According to facility representatives, the UST only contained coolant oil. However, soil and ground water analysis revealed that both media were contaminated with VOCs. Facility representatives speculated that the contamination might have been caused by the site's previous owner, Mathew Farm Machinery. On behalf of Precision, Maecorp, Inc. (Maecorp) developed a two-phase remediation program for the contaminated media. Phase one involved a Soil Vapor Extraction System (SWMU 13), designed to

remediate the contaminated soil. Phase two, still in the proposal stage, involves construction of a Proposed Ground Water Remediation System (SWMU 14), designed to treat the contaminated ground water with activated carbon. Once treated, the water will be discharged to the City of Crystal Lake Sanitary Sewer under a National Pollutant Discharge Elimination System (NPDES) permit.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the facility. Throughout the history of the Precision facility, there have been three documented releases. Two of the releases are currently under remediation, while the third has yet to be addressed.

In January 1988, FIW was contracted by Precision to remove a 1,500-gallon UST and a 7,000-gallon UST. The 1,500-gallon Waste Coolant Oil UST (SWMU 7), located on the west side of Building 1, was certified clean and closed-in-place, while the 7,000-gallon Fuel Oil UST (AOC 1), located on the east side of Building 1, was certified clean and removed (FIW, 1988). Even though the tanks themselves were cleaned, VOC-contaminated soil and ground water were detected near SWMU 7 and VOC-contaminated soil was detected near AOC 1. Precision has contracted Maecorp, Inc. (Maecorp) to address the contaminated soil and ground water around SWMU 7, but no remediation plan has been initiated for the contaminated soil around AOC 1. According to Chuck Mullen, Corporate Safety Director at Precision, SWMU 7 only managed nonhazardous waste coolant oil; so the actual source of the contamination is unknown. A RCRA Section 3007 Information Request Letter was sent by EPA to Precision concerning Qu Voe Chemical Industries, Inc. (Qu Voe) in Des Plaines, Illinois and Schiller Park, Illinois (EPA, 1981). In Precision's response, the facility stated that some waste coolant oil manifested off site in the early 1980s contained TCE (Precision, 1981). Mr. Mullen also stated that the former owner of the site, Mathew Farm Machinery, could have caused the contamination. Maecorp has installed a Soil Vapor Extraction System (SWMU 13) to remediate the contaminated soil around SWMU 7. The contaminated ground water is migrating off site, towards the west. Maecorp has developed a Proposed Ground Water Remediation System (SWMU 14), that will address the contaminated ground water.

In October 1991, Maecorp submitted a closure plan on Precision's behalf for the Barium Washwater Tank (SWMU 1) and the Barium Drum Storage Area (SWMU 2). No contamination was detected around SWMU 1. However, barium-contaminated soil was detected around SWMU 2. There has been no documented date as to when the actual release that caused the contamination occurred, but it is believed to have happened over the life of the SWMU. According to the analysis, the contamination had not leached to ground water. Remediation of the contaminated soil will be conducted in conjunction with the closure of both SWMUs.

The soil and ground water clean up objectives, as set by IEPA, for SWMU 7 are included as Attachment D (IEPA, 1992b). IEPA's soil clean up objectives for SWMU 2 are included as Attachment E (IEPA, 1991a).

2.5 REGULATORY HISTORY

Precision submitted a Notification of Hazardous Waste Activity form to EPA on August 18, 1980 designating the company as a generator and treatment, storage, or disposal facility (TSD) (Precision, 1980a). Precision submitted a Part A permit application to EPA on November 17, 1980 listing D001, F001, and D005 waste codes (Precision, 1980b). The Part A permit application listed the regulated units as a 275-gallon capacity container storage area (S01); a 3,200-gallon capacity container storage area (S01); a 92-gallon container storage area (S01), a 220-gallon container storage are (S01), a 3,273-gallon capacity storage tank (S02), a 6,000-gallon capacity storage tank (S02), and a 3,000-cubic-yard capacity waste pile (S03). When Precision filed a closure plan in October 1991, it addressed only the Barium Washwater Tank (SWMU 1), the 6,000-gallon capacity S02 unit listed above, and the Barium Drum Storage Area (SWMU 2), the 3,200-gallon capacity S01 unit listed above. The closure plan did not list the other process codes identified on the November 17, 1980 Part A permit application. IEPA rejected Precision's October 1991 closure plan on the basis that it did not address the other process codes identified on the facility's Part A (IEPA, 1991c). In a July 18, 1991 letter from Precision to IEPA, the facility explained that the information about certain SWMUs and corresponding capacities were mistakenly put on the original Part A and that the only units to ever manage RCRA wastes were SWMUs 1 and 2. Mr. Mullen stated that the other units listed on the original Part A permit application either managed nonhazardous wastes or never managed wastes. In the letter, Precision stated it would send an amended Part A permit application.

The amended application was not submitted until January 20, 1992, after the facility submitted its October 1991 closure plan (Precision, 1992a). Consequently, IEPA only had Precision's original Part A, and therefore rejected the closure plan due to insufficient information. Precision's amended Part A listed a 3,300-gallon capacity container storage area (S01) (SWMU 2) and a 5,000-gallon capacity storage tank (S02) (SWMU 1). On February 20, 1992, Precision submitted a revised closure plan addressing SWMUs 1 and 2 (Precision, 1992b). An April 23, 1992 letter from IEPA to Precision approved the amended Part A permit application and the revised closure plan and stated that closure must be completed by December 1, 1992 (IEPA, 1992b). Precision is still regulated as a generator and TSD facility.

Precision has had some RCRA compliance problems noted during 1982 and 1990 inspections conducted by IEPA. A May 11, 1982 inspection detected deficiencies in Precision's waste analysis plan, training records, and operating records (IEPA, 1982). No documentation was available stating whether the violations were resolved. An April 17, 1990 inspection again detected deficiencies in the facility's waste analysis, training records, and operating records (IEPA, 1990a). These violations were considered resolved according to a July 20, 1990 letter from IEPA to Precision (IEPA, 1990b).

Precision has an IEPA Permit (No. 111015ACT) to operate the Soil Vapor Extraction System (SWMU 13) (IEPA, 1991b). Precision also has an IEPA Permit (No. 1992-EN-4606) to construct a water pollution control facility to treat contaminated ground water (IEPA, 1992a). Precision has applied for a permit with the City of Crystal Lake to discharge the treated ground water to the municipal sewer system. Precision also applied for a National Pollutant Discharge Elimination System (NPDES) permit to discharge treated ground water. However, after the permit application with the City of Crystal Lake was accepted, Precision withdrew its NPDES permit application.

On February 27, 1981, Precision was sent a RCRA Section 3007 Information Request letter concerning the disposal of waste oil at Qu Voe in Des Plaines, Illinois and Schiller Park, Illinois. Of the eight manifests sent to EPA attached to Precision's response, one stated that approximately 15 gallons of TCE were mixed with waste oil. The response did not state if the wastes were managed at Precision. No other information concerning this incident was in Precision's file.

TABLE 2

SOLID WASTES

Waste/EPA Waste Code[a]	Source	Solid Waste Management Unit
Barium Washwater/(D005)	Heat Treating	1 and 2
Barium Solids/(D005)	Heat Treating	2 and 3
Spent TCE/(F001)	Degreasing	3 and 4
Welding Particulates/NA	Welding	11 and 12
Cutting Particulates/NA	Cutting and grinding	12
Waste Cutting Oil/NA	Cutting and grinding	5, 6, and 10
Waste Coolant Oil/NA	Cutting and grinding	5, 6, 7, and 10
Carbide Sludge/NA	Cutting and grinding	9 and 10
Oil Dry/NA	Maintenance	5 and 8
Rinse Water/NA	Closure of SWMU 2	6
VOC-Contaminated Soil	SWMU 7	13
VOC-Contaminated Ground Water	SWMU 7	14

Notes:

[a] Not applicable (NA) designates nonhazardous waste.

next to the heat treating operation. When full, the drum of waste is transferred to SWMU 2. Generated at a rate of 3,000 gallons per year, the spent barium solids (D005) are picked up by Michigan Disposal, Inc. (MDI) and landfilled at the Envirosafe Services Landfill in Oregon, Ohio.

Precision uses TCE in four vapor degreasers and one submersible degreaser. The degreasers are used to clean the drill bits prior to heat treating. The spent TCE (F001) from the bottoms of the degreasers are pumped weekly into a 55-gallon drum. The drum is managed in a Satellite Accumulation Area (SWMU 3) before transfer to the TCE Drum Storage Area (SWMU 4). Generated at a rate of 2,250 gallons per year, the spent TCE (F001) is picked up by Avganic Industries, Inc. for fuel blending.

During the welding operation, fine metal particulates are generated. The nonhazardous welding particulates are vacuumed into a 55-gallon drum at the base of a Welding Particulate Baghouse (SWMU 11). When the drum becomes full, the waste is transferred to the Nonhazardous Waste Dumpster (SWMU 12). The welding particulates are mingled with cutting oil particulates generated from the maintenance of the central oil system.

The cutting oil used in the grinding and cutting of drill bits is supplied to the machines by a central oil system. The central oil system is a 50,000-gallon closed loop system used to recirculate the large amounts of cutting oils used at the facility. The system has three filters used to collect metal particulates generated from cutting and grinding drill bits. During routine maintenance, the filters are cleaned and the nonhazardous cutting particulates are scraped into a Nonhazardous Waste Dumpster (SWMU 12). The cutting particulates are mixed with nonhazardous welding particulates in SWMU 12. The combined wastes are generated at a rate of 18,000 gallons per month and are picked up by Waste Management of McHenry County for disposal at Settlers Hill Landfill (Settlers Hill) in Batavia, Illinois.

During the various types of grinding, stamping, and cutting that are conducted at the Precision facility, cutting oils and coolant oils are used. Some machines require both cutting oil and coolant oil, some require only cutting oil, while some require only coolant oil. Nonhazardous waste cutting oil and nonhazardous waste coolant oil are collected separately in Waste Cutting Oil and Coolant Oil Collection Areas (SWMU 5), located beneath each machine. The waste cutting oil and

waste coolant oil are pumped into separate Shop-Vac vacuum systems. The wastes are then transferred in their respective shop-vacs and pumped into the Waste Cutting Oil and Coolant Oil Tanks (SWMU 6). Prior to 1978, the waste coolant oil was pumped into the Waste Coolant Oil UST (SWMU 7). Occasionally, the waste cutting oil and the waste coolant oil are pumped from the shop-vac into 55-gallon drums and managed in a Nonhazardous Waste Drum Storage Area (SWMU 10). The waste oils are then transferred from SWMU 10 to SWMU 6 via the shop-vacs.

In March 1992, Precision began producing carbide drill bits. The grinding and cutting of carbide drill bits generates fine carbide particulates. The carbide particulates are vacuumed from the machining operations by a wet vacuuming system. The wet carbide particulates form a nonhazardous carbide sludge, which is collected in a Carbide Sludge Collection System (SWMU 9). The facility recently began generating nonhazardous carbide sludge, so a generation rate is not yet available. When the reservoir becomes full of carbide sludge, the waste is scraped out and placed in 55-gallon drums and managed in SWMU 10.

Oil dry is used to clean up excess oil around the cutting and grinding machines. The oil dry is scooped up and placed inside 55-gallon drums and initially managed in Waste Cutting Oil and Coolant Oil Collection Areas (SWMU 5). Precision employees routinely take the 55-gallon drums of oil dry from SWMU 5 and dump the contents into the Oil Dry Dumpster (SWMU 8). Generated at a rate of 31,000 gallons per year, the waste is landfilled at Settlers Hill.

During the closure of SWMU 2, nine drums of nonhazardous rinse water were generated from cleaning the concrete pad. The drums were transferred to SWMU 6 and will be sent off site when closure is complete.

In January 1988, during the decommissioning of the Waste Coolant Oil UST (SWMU 7) by FIW, VOC-contaminated soil and ground water were discovered. According to facility representatives, the UST only contained coolant oil. However, soil and ground water analysis revealed that both media were contaminated with VOCs. Facility representatives speculated that the contamination might have been caused by the site's previous owner, Mathew Farm Machinery. On behalf of Precision, Maecorp, Inc. (Maecorp) developed a two-phase remediation program for the contaminated media. Phase one involved a Soil Vapor Extraction System (SWMU 13), designed to

remediate the contaminated soil. Phase two, still in the proposal stage, involves construction of a Proposed Ground Water Remediation System (SWMU 14), designed to treat the contaminated ground water with activated carbon. Once treated, the water will be discharged to the City of Crystal Lake Sanitary Sewer under a National Pollutant Discharge Elimination System (NPDES) permit.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the facility. Throughout the history of the Precision facility, there have been three documented releases. Two of the releases are currently under remediation, while the third has yet to be addressed.

In January 1988, FIW was contracted by Precision to remove a 1,500-gallon UST and a 7,000-gallon UST. The 1,500-gallon Waste Coolant Oil UST (SWMU 7), located on the west side of Building 1, was certified clean and closed-in-place, while the 7,000-gallon Fuel Oil UST (AOC 1), located on the east side of Building 1, was certified clean and removed (FIW, 1988). Even though the tanks themselves were cleaned, VOC-contaminated soil and ground water were detected near SWMU 7 and VOC-contaminated soil was detected near AOC 1. Precision has contracted Maecorp, Inc. (Maecorp) to address the contaminated soil and ground water around SWMU 7, but no remediation plan has been initiated for the contaminated soil around AOC 1. According to Chuck Mullen, Corporate Safety Director at Precision, SWMU 7 only managed nonhazardous waste coolant oil; so the actual source of the contamination is unknown. A RCRA Section 3007 Information Request Letter was sent by EPA to Precision concerning Qu Voe Chemical Industries, Inc. (Qu Voe) in Des Plaines, Illinois and Schiller Park, Illinois (EPA, 1981). In Precision's response, the facility stated that some waste coolant oil manifested off site in the early 1980s contained TCE (Precision, 1981). Mr. Mullen also stated that the former owner of the site, Mathew Farm Machinery, could have caused the contamination. Maecorp has installed a Soil Vapor Extraction System (SWMU 13) to remediate the contaminated soil around SWMU 7. The contaminated ground water is migrating off site, towards the west. Maecorp has developed a Proposed Ground Water Remediation System (SWMU 14), that will address the contaminated ground water.

In October 1991, Maecorp submitted a closure plan on Precision's behalf for the Barium Washwater Tank (SWMU 1) and the Barium Drum Storage Area (SWMU 2). No contamination was detected around SWMU 1. However, barium-contaminated soil was detected around SWMU 2. There has been no documented date as to when the actual release that caused the contamination occurred, but it is believed to have happened over the life of the SWMU. According to the analysis, the contamination had not leached to ground water. Remediation of the contaminated soil will be conducted in conjunction with the closure of both SWMUs.

The soil and ground water clean up objectives, as set by IEPA, for SWMU 7 are included as Attachment D (IEPA, 1992b). IEPA's soil clean up objectives for SWMU 2 are included as Attachment E (IEPA, 1991a).

2.5 REGULATORY HISTORY

Precision submitted a Notification of Hazardous Waste Activity form to EPA on August 18, 1980 designating the company as a generator and treatment, storage, or disposal facility (TSD) (Precision, 1980a). Precision submitted a Part A permit application to EPA on November 17, 1980 listing D001, F001, and D005 waste codes (Precision, 1980b). The Part A permit application listed the regulated units as a 275-gallon capacity container storage area (S01); a 3,200-gallon capacity container storage area (S01); a 92-gallon container storage area (S01), a 220-gallon container storage are (S01), a 3,273-gallon capacity storage tank (S02), a 6,000-gallon capacity storage tank (S02), and a 3,000-cubic-yard capacity waste pile (S03). When Precision filed a closure plan in October 1991, it addressed only the Barium Washwater Tank (SWMU 1), the 6,000-gallon capacity S02 unit listed above, and the Barium Drum Storage Area (SWMU 2), the 3,200-gallon capacity S01 unit listed above. The closure plan did not list the other process codes identified on the November 17, 1980 Part A permit application. IEPA rejected Precision's October 1991 closure plan on the basis that it did not address the other process codes identified on the facility's Part A (IEPA, 1991c). In a July 18, 1991 letter from Precision to IEPA, the facility explained that the information about certain SWMUs and corresponding capacities were mistakenly put on the original Part A and that the only units to ever manage RCRA wastes were SWMUs 1 and 2. Mr. Mullen stated that the other units listed on the original Part A permit application either managed nonhazardous wastes or never managed wastes. In the letter, Precision stated it would send an amended Part A permit application.

The amended application was not submitted until January 20, 1992, after the facility submitted its October 1991 closure plan (Precision, 1992a). Consequently, IEPA only had Precision's original Part A, and therefore rejected the closure plan due to insufficient information. Precision's amended Part A listed a 3,300-gallon capacity container storage area (S01) (SWMU 2) and a 5,000-gallon capacity storage tank (S02) (SWMU 1). On February 20, 1992, Precision submitted a revised closure plan addressing SWMUs 1 and 2 (Precision, 1992b). An April 23, 1992 letter from IEPA to Precision approved the amended Part A permit application and the revised closure plan and stated that closure must be completed by December 1, 1992 (IEPA, 1992b). Precision is still regulated as a generator and TSD facility.

Precision has had some RCRA compliance problems noted during 1982 and 1990 inspections conducted by IEPA. A May 11, 1982 inspection detected deficiencies in Precision's waste analysis plan, training records, and operating records (IEPA, 1982). No documentation was available stating whether the violations were resolved. An April 17, 1990 inspection again detected deficiencies in the facility's waste analysis, training records, and operating records (IEPA, 1990a). These violations were considered resolved according to a July 20, 1990 letter from IEPA to Precision (IEPA, 1990b).

Precision has an IEPA Permit (No. 111015ACT) to operate the Soil Vapor Extraction System (SWMU 13) (IEPA, 1991b). Precision also has an IEPA Permit (No. 1992-EN-4606) to construct a water pollution control facility to treat contaminated ground water (IEPA, 1992a). Precision has applied for a permit with the City of Crystal Lake to discharge the treated ground water to the municipal sewer system. Precision also applied for a National Pollutant Discharge Elimination System (NPDES) permit to discharge treated ground water. However, after the permit application with the City of Crystal Lake was accepted, Precision withdrew its NPDES permit application.

On February 27, 1981, Precision was sent a RCRA Section 3007 Information Request letter concerning the disposal of waste oil at Qu Voe in Des Plaines, Illinois and Schiller Park, Illinois. Of the eight manifests sent to EPA attached to Precision's response, one stated that approximately 15 gallons of TCE were mixed with waste oil. The response did not state if the wastes were managed at Precision. No other information concerning this incident was in Precision's file.

The 1988 removal of SWMU 7 and the Fuel Oil UST (AOC 1), were certified by a Professional Engineer. The soil and ground water contaminated at SWMU 7 are under an IEPA directed remediation. The contaminated soil at AOC 1 has yet to be addressed.

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and ground water in the vicinity of the facility.

2.6.1 Climate

The climate in McHenry County is continental with hot summers and cold winters. The average daily temperature is 47.8 degrees Fahrenheit (°F). The lowest average daily temperature is 18.3°F in January. The highest average daily temperature is 73.0°F in July (NOAA, 1990).

The total annual precipitation for the county is 36.78 inches. The mean annual lake evaporation for the area is about 30 inches. The 1-year, 24-hour maximum rainfall is about 6.42 inches (NOAA, 1990).

The prevailing wind is from the south-southwest, and the average wind speed is 10.0 miles per hour. Average wind speed is highest in April at 11.8 miles per hour from the west-northwest (NOAA, 1990).

2.6.2 Flood Plain and Surface Water

The facility is located in a Zone C flood plain, that is an area of minimal flooding, outside the 500-year and 100-year flood plains (FEMA, 1985). The nearest surface water is Veterans Acres Park Lake, which is used for recreational purposes, is located 0.5 mile west of the facility. Surface water drainage is towards a 30-acre palustrine, emergent, seasonally-flooded wetland immediately to the east of the facility.

2.6.3 Geology and Soils

The facility is underlain by soils of the Brenton Silt Loam Series. This is a dark, relatively poorly- drained soil with moderate permeability (0.6 to 2.0 inches per hour) and high moisture-holding capacity (more than 0.15 inch of water per inch of soil). The top 8 to 13 inches consist of black or dark brown friable silt loam underlain by dark grayish-brown silty clay loam subsoil extending to between 20 and 32 inches below grade. The lowest portion of the subsoil is mottled dark grayish-brown clay loam, underlain by gray and yellowish-brown silt loam, sandy loam, and clay loam, with small amounts of gravel (USDA, 1965).

The unconsolidated deposits, or drift, consist of Wisconsinan sand and gravel glacial deposits designated as the Batavia Member of the Henry Formation. These deposits are well sorted, and were laid down by glacial streams on outwash plains. Approximately 1 mile to the east are deposits of the Valparaiso Morainic System, specifically the Cary Moraine, which consists of this till strata on gravel (Willman and Lineback, 1970). Site-specific information from boring activities indicates that the facility is underlain by medium-grained sands and silts with some interbedded clay layers (Maecorp, 1992). The exact depth to bedrock is not known, but is estimated to be between 200 and 250 feet (Willman, 1971; Lund, 1965).

The uppermost bedrock underlying the facility is Silurian dolomite of the Alexandrian and Niagaran Series. This consists of dolomite of varying degrees of purity; the upper part of the Silurian rocks consists of reefs of pure dolomite surrounded by well-bedded, argillaceous to cherty dolomite, while the lower part is generally composed of distinctive, laterally continuous units. Silurian rocks total approximately 200 feet in thickness, and are underlain by about 150 feet of Ordovician Maquoketa gray-brown shale with interbedded dolomite or limestone, 300 feet of Galena-Platteville dolomite and limestone, and 150 feet of Glenwood-St. Peter sandstone. The Prairie du Chien, Trempealeau, and Franconia Formations, straddling the Cambrian-Ordovician boundary, consist of dolomites with varying proportions of sandstone and shale, and total about 300 feet in thickness. The underlying Cambrian deposits are the Ironton-Galesville sandstone, the Eau Claire shale and siltstone, and the Mount Simon sandstone, underlain by Precambrian crystalline rocks (Willman, 1971; Suter, et al, 1959).

2.6.4 Ground Water

The sand and gravel deposits in the vicinity of the facility are permeable and form an excellent source of ground water in the region. Yields from wells completed in the drift may yield in excess of 1,000 gallons per minute (gpm). The Niagaran-Alexandrian dolomites contain more crevices and solution channels in the upper portion, and when permeability is high, yields may be greater than 1,000 gpm. The underlying Maquoketa shale acts as a barrier between shallow and deep aquifers. The Galena-Platteville, Glenwood-St. Peter, Prairie du Chien, Trempealeau, and Franconia Formations yield small amounts of water; however, the Cambrian Ironton-Galesville sandstone accounts for approximately 80 percent of the Cambrian-Ordovician aquifer pumpage; and is a good source of ground water throughout McHenry County. The top of this aquifer lies at a depth of between 1,000 and 1,200 feet below grade (Bergstrom, et al, 1955; Suter, et al, 1959).

Ground water flow at the facility appears to be towards the west-northwest. The water table is generally 15 feet below grade (Maecorp, 1992).

2.7 RECEPTORS

The Precision facility occupies 134,000 square feet in a residential area of Crystal Lake, McHenry County, Illinois. Crystal Lake has a population of about 18,000 people.

Precision is bordered on the north by Mathew Farm Machinery, on the west and south by residences, and on the east by a wetland. The nearest school, Central School, is located about 0.75 mile southwest of the facility of the facility. The facility has no fencing, but has security guards and TV monitoring.

The nearest surface water body is Veterans Acres Park Lake, located 0.5 mile west of the facility and used for recreational purposes.

Ground water supplies the City of Crystal Lake and the facility with water. Ground water flows in a southeast to northwest direction and can be reached at a depth of 15 feet; however, most wells are at a depth of 245 feet. The closest private well is located 400 feet south of the facility.

The closest municipal well is 2,000 feet south of the facility. The closest well downgradient from Precision is a private well located approximately 3,000 feet to the west.

Immediately to the east of the facility is a 30-acre palustrine, emergent, seasonally-flooded wetland. An 80-acre palustrine, emergent, seasonally-flooded wetland is also located approximately 1 mile north of the facility.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the 14 SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and RAI's observations. Figure 2 shows the SWMU locations.

SWMU 1	**Barium Washwater Tank**
Unit Description:	The Barium Washwater Tank was a 5,000-gallon aboveground steel tank used to manage barium wastes generated from heat treating operations. The unit was located indoors, against the west wall of Building 1. A concrete containment pit measuring 24 feet long by 18 feet wide by 6.9 feet deep, and capable of holding 26,000 gallons, is located underground, on the east side of where the unit was previously situated. The floor is sloped towards the opening of the pit, which is covered by a metal grate (see Photograph No. 1).
Date of Startup:	This unit began managing wastes in 1965.
Date of Closure:	The tank was decommissioned and removed on May 5, 1992. Precision is currently awaiting IEPA approval of RCRA closure.
Wastes Managed:	This unit managed barium washwater (D005).
Release Controls:	The unit had a 26,000-gallon containment pit located immediately to the east.
History of Documented Releases:	No releases from this unit have been documented.

Observations:	RAI observed that the tank was removed. RAI noted no evidence of release. Production equipment is currently in the area.
SWMU 2	**Barium Drum Storage Area**
Unit Description:	The Barium Drum Storage Area is located outside, on the east side of Building 1 and is used to manage barium wastes generated from heat treating operations. The unit measures 20 feet by 100 feet and has a 6-inch-thick concrete base. A 1,000-gallon concrete pit is located underneath the unit. The unit does not have fencing surrounding it, nor a roof covering it (see Photograph No. 2).
Date of Startup:	This unit began operation in 1965.
Date of Closure:	This unit is currently undergoing RCRA closure as a greater than 90 day storage area. After closure, the unit will manage hazardous wastes for less than 90 days only.
Wastes Managed:	This unit manages barium washwater (D005) and barium solids (D005).
Release Controls:	The unit has a 1,000-gallon concrete underground containment pit underneath it, to contain releases. The base of the unit is sloped towards an opening, covered with a steel grate, that leads to the pit.
History of Documented Releases:	There have been no documented releases from this unit. However, during closure, soil analysis detected barium contamination. The facility is currently remediating the contaminated soil in conjunction with closure of the unit.

Observations:	Portions of the concrete base were observed broken up to allow for soil excavation. Numerous boring holes were also noted. During the VSI, 22 drums of barium waste (D005) and 25 overpacked drums of VOC-contaminated soil from the soil remediation near SWMU 7 were also observed. All drums were stored on undisturbed portions of the concrete base; however, minor cracks were observed near the drums. When closure is complete, the base will be re-poured and the unit will manage wastes for less than 90 days.
SWMU 3	**Satellite Accumulation Areas**
Unit Description:	The Satellite Accumulation Areas are located inside Building 1. The unit consists of a single 55-gallon steel drum used to manage spent TCE generated from the TCE degreasers and a single drum of spent barium solids generated from heat treating operations. The drum of spent TCE is stored inside a 30-foot by 50-foot cinder block room in Building 1. The drum of spent barium solids is stored inside a 50-foot by 60-foot section in Building 1 (see Photographs No. 3 and 4).
Date of Startup:	This unit began managing wastes in 1965.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages spent TCE (F001) and barium solids (D005).
Release Controls:	The drums are stored indoors, on top of a 6-inch-thick concrete floor.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	At the time of the VSI, no spent TCE was observed. A full drum was transferred to the TCE Drum Storage Area (SWMU 4) the previous

day. There was one drum containing spent barium solids. RAI noted no evidence of release and no floor drains were noted.

SWMU 4	**TCE Drum Storage Area**
Unit Description:	The TCE Drum Storage Area is located indoors, in an 18-foot by 25-foot room in Building 3 and is used to manage wastes generated from degreasers. The room has a 6-inch-thick concrete floor, cinder block walls, and a sliding steel door (see Photograph No. 5).
Date of Startup:	This unit began operation in 1965.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages spent TCE (F001).
Release Controls:	The wastes are stored inside steel drums, located on top of 6 inches of concrete, in a room with cinder block walls.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	At the time of the VSI, 12 drums of spent TCE were in the unit. Small, superficial cracks were observed in the floor. RAI noted no evidence of release and no floor drains were noted.
SWMU 5	**Waste Cutting Oil and Coolant Oil Collection Areas**
Unit Description:	The Waste Cutting Oil and Coolant Oil Collection Areas are located indoors, at numerous locations throughout the facility. The unit consists of separate drip trays used to collect cutting oil and coolant oil, as well as 55-gallon steel drums of oil dry. The drip trays used to

collect cutting oil and coolant oil vary in size, but all are located directly under the cutting and grinding machines that utilize the oils. When the oils splash out of the trays, oil dry is applied as an absorbent. The oil dry is collected in drums, also located throughout the facility. All of the drip trays and oil dry drums are constructed of steel and are situated on top of 6 inches of concrete (see Photographs No. 6 and 7).

Date of Startup: This unit began operation in 1965.

Date of Closure: This unit is currently active.

Wastes Managed: This unit manages nonhazardous waste cutting oil, nonhazardous waste coolant oil, and nonhazardous oil dry.

Release Controls: The oil dry is actually the release control for the cutting oil and coolant oil. Concrete flooring also acts as a release control for the wastes within the unit.

History of Documented Releases: No releases from this unit have been documented.

Observations: During the VSI, the drip trays appeared to be adequately managing the residual oils dripping off the machines. However, some oils and oil dry were observed on the floor throughout the facility.

SWMU 6 **Waste Cutting Oil and Coolant Oil Tanks**

Unit Description: The Waste Cutting Oil and Coolant Oil Tanks are located outdoors, north of Building 1 and are used to manage waste cutting oil and waste coolant oil. Waste cutting oil is managed in a 1,500-gallon steel tank, while waste coolant oil is managed in a 2,000-gallon steel tank.

	The tanks are situated aboveground in a 15-foot wide by 30-foot long by 1-foot deep containment pit that has a 6-inch-thick concrete base. In the center of the containment pit is a drain that leads to a 2,000-gallon concrete secondary containment tank. Also included in this unit is an area located 20 feet northwest of the tanks, used to manage drums of rinse water generated from the closure of SWMU 2. The 55-gallon steel drums of rinse water are stored on top of 6 inches of concrete in an area measuring 5 feet by 30 feet (see Photographs No. 8 and 9).
Date of Startup:	The waste cutting oil tank began operations in 1965; the waste coolant oil tank began operations in 1980; and the drums of rinse water were placed in the unit in May 1992.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous waste cutting oil, nonhazardous waste coolant oil, and nonhazardous rinse water generated from closure of SWMU 2.
Release Controls:	The waste cutting oil and waste coolant oil tanks are in a 450-cubic-foot concrete pit. The pit has a drain that leads to a 2,000-gallon concrete secondary containment tank. The drums of rinse water are stored on top of 6 inches of concrete.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The tanks appeared worn, but sound. At the time of the VSI, there were nine drums of rinse water at this unit. RAI noted no evidence of release.

SWMU 7	**Waste Coolant Oil UST**
Unit Description:	The Waste Coolant Oil UST is a 1,500-gallon unit located west of Building 1. The concrete tank was used to manage waste coolant oil prior to installation of the waste coolant oil tank in SWMU 6. The unit was closed- in-place in 1988 (see Photograph No. 10).
Date of Startup:	This unit began managing wastes in 1974.
Date of Closure:	The unit ceased managing wastes in 1978. In 1988, the unit was closed-in- place.
Wastes Managed:	This unit managed nonhazardous waste coolant oil.
Release Controls:	The unit did not have any release controls.
History of Documented Releases:	There have been no documented releases from this unit however, during the January 1988 closure, VOC-contaminated soil and ground water was detected. Facility representatives stated that the UST only managed nonhazardous waste coolant oil. However, according to Precision's response to a RCRA Section 3007 Information Request letter regarding Qu Voe, the facility mixed TCE with waste oil. This could account for the VOC contamination. Both media are under remediation.
Observations:	The area where the UST is located is covered with gravelly soil. Maecorp has installed a Soil Vapor Extraction System (SWMU 13) to remediate contaminated soil. There is a Proposed Ground Water Remediation System (SWMU 14) to remediate contaminated ground water.

SWMU 8	**Oil Dry Dumpster**
Unit Description:	The Oil Dry Dumpster is located outdoors, north of Building 2, on top of 6 inches of concrete. The unit, a 20-cubic-yard steel dumpster, manages oil dry generated from the clean up of spilled oil. A drain that leads to the City of Crystal Lake sewer system is located 10 feet east of the dumpster (see Photograph No. 11).
Date of Startup:	This unit began operation in 1965.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous oil dry.
Release Controls:	The unit is constructed of steel. There is no secondary containment.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The unit appeared sound and RAI noted no evidence of release.
SWMU 9	**Carbide Sludge Collection System**
Unit Description:	The Carbide Sludge Collection System is located indoors, inside the TSC Building. The unit consists of a venting system and a 150-gallon steel reservoir used to accumulate carbide particulates. Due to the wet vacuuming system, the waste is in a sludge state when it enters the reservoir. The reservoir is located on a steel grating which is underlain by a 15-foot by 15-foot by 15-foot concrete pit (see Photograph No. 12).
Date of Startup:	This unit began operation in March 1992.

Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous carbide sludge.
Release Controls:	There is a 3,375-cubic-foot concrete containment pit beneath the unit.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	At the time of the VSI, facility personnel were removing carbide sludge from the reservoir and placing the waste in a 55-gallon drum. The unit appeared sound and no evidence of release was noted.

SWMU 10 **Nonhazardous Waste Drum Storage Area**

Unit Description:	The Nonhazardous Waste Drum Storage Area is located indoors, inside Building 1. The 35-foot by 50-foot room is used to store waste cutting oil and waste coolant oil and will be used to store carbide sludge. Waste cutting oil and waste coolant oil are stored in this unit on occasion, before transfer to SWMU 6. The unit's walls are constructed of cinder blocks and the floor is 6-inch-thick concrete (see Photograph No. 13).
Date of Startup:	This unit began operation in 1980.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous waste cutting oil, nonhazardous waste coolant oil, and will manage nonhazardous carbide sludge.
Release Controls:	The wastes are stored indoors, in a cinder block room with concrete floors.

History of Documented Releases:	No releases from this unit have been documented.
Observations:	At the time of the VSI, there were three drums of waste cutting oil and two drums of waste coolant oil in the unit. These drums were stored closed. There were no drums of carbide sludge in the unit. RAI noted no evidence of release and no floor drains were noted.
SWMU 11	**Welding Particulate Baghouse**
Unit Description:	The Welding Particulate Baghouse is locate outdoors, west of Building 2 and is used to collect metal particulates generated from welding operations. Metal particulates are vacuumed from the 12-foot by 12-foot welding operation into the baghouse. The particulates settle into a 55-gallon steel drum located at the bottom of the unit (see Photograph No. 14).
Date of Startup:	This unit began operation in 1974.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous welding particles.
Release Controls:	The unit itself controls releases of welding particles and is located outdoors on a concrete floor.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The unit appeared sound and RAI noted no evidence of release. At the time of the VSI, there was not a collection drum at the base of the unit; but the system was not operating.

SWMU 12	**Nonhazardous Waste Dumpster**
Unit Description:	The Nonhazardous Waste Dumpster is located indoors, on the east side of Building 1. The 8-cubic-yard steel unit manages cutting oil particulates and welding particles. The dumpster is situated on top of 6 inches of concrete. (see Photograph No. 15).
Date of Startup:	This unit began operation in 1974.
Date of Closure:	This unit is currently active.
Wastes Managed:	This unit manages nonhazardous cutting oil particulates and nonhazardous welding particulates.
Release Controls:	The wastes are managed indoors, inside a steel dumpster that rests on top of 6 inches of concrete. The unit does not have secondary containment.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The unit appeared sound. No evidence of a release and no nearby floor drains were noted.
SWMU 13	**Soil Vapor Extraction System**
Unit Description:	The Soil Vapor Extraction System is set up to remediate VOC-contaminated soil at SWMU 7. The unit consists of a trailer that houses a pumping system used to extract vapors from the soil. Vapors are pumped through an activated carbon absorption system and exhausted to the air under an IEPA permit. Emission rates for the

	system are not to exceed 0.1 pounds per hour or 0.44 tons per year (see Photograph No. 16).
Date of Startup:	This unit began operations in 1991.
Date of Closure:	This unit is currently active and will be removed when the soil is remediated according to IEPA cleanup objectives.
Wastes Managed:	This unit manages VOCs.
Release Controls:	The activated carbon removes the VOCs from the soil.
History of Documented Releases:	No releases from this unit have been documented. However, nonhazardous vapors are released to the air under the authority of an IEPA permit.
Observations:	The unit was operating at the time of the VSI and no evidence of release was detected.
SWMU 14	**Proposed Ground Water Remediation System**
Unit Description:	The Proposed Ground Water Remediation System is designed to treat contaminated ground water. The unit will be located aboveground and outdoors, on the southwest corner of Building 2. Once installed, ground water will be pumped via subsurface piping through a 5-micron filter. The ground water will then proceed through an 800-gallon steel clarifier before proceeding through two, 300-pound capacity, activated carbon cells. The carbon cells are designed to remove TCE, DCE, and PCE as well as any other dissolved organics. Treated ground water will be discharged to the sanitary sewer under a

	permit issued by the City of Crystal Lake at a rate of 21,600 gallons per day (see Photograph No. 17).
Date of Startup:	This unit is proposed and has yet to begin operations. Facility representatives anticipate that construction will begin in August 1992.
Date of Closure:	This unit will be removed when the ground water is remediated to IEPA clean up objectives.
Wastes Managed:	This unit will manage TCE, DCE, and PCE contaminated ground water.
Release Controls:	Because the unit is not operating, release controls are unknown.
History of Documented Releases:	The unit has not begun operations, so no releases have been documented.
Observations:	The unit has not yet been installed.

4.0 AREAS OF CONCERN

RAI identified one AOC during the PA/VSI. This AOC is discussed below; its location is shown in Figure 2.

AOC 1 **Fuel Oil UST**

In January 1988, FIW was contracted to remove a 7,000-gallon Fuel Oil UST installed during the 1960s. The UST was cleaned and removed in February 1988; however, several holes were detected in the bottom of the UST. Analysis of a single soil sample taken by FIW detected VOC contamination. No ground water samples were taken in this area. This area is an AOC because soil contamination and possible ground water contamination have not been fully characterized and a remediation plan has yet to be initiated.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified 14 SWMUs and one AOC at the Precision facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are RAI's conclusions and recommendations for each SWMU. Table 3, at the end of this section, summarizes the SWMUs and AOCs at the facility and the recommended further actions.

SWMU 1 **Barium Washwater Tank**

Conclusions: The Barium Washwater Tank was used to manage hazardous barium washwater (D005) from 1965 until May 5, 1992, when the unit was removed. The area that managed the tank is currently undergoing RCRA closure. No release to ground water, surface water, air, or on-site soils have been detected during closure. Because the unit has been removed, current potential for release to environmental media is low. Past potential for release to environmental media was also low because the unit was constructed of steel, had a secondary containment pit, and was located indoors.

Recommendations: RAI recommends that the facility continue with closure as scheduled.

SWMU 2 **Barium Drum Storage Area**

Conclusions: The Barium Drum Storage Area is used to manage drums of hazardous barium washwater (D005) and hazardous barium solids (D005). The unit is currently undergoing RCRA closure as a greater than 90-day storage area. Once closure is complete, the unit will continue to manage hazardous waste for less than 90 days. Soil

analysis detected barium contamination from several soil borings taken in the storage pad. Ground water samples taken during closure have proven negative. Once closure is complete and the soil is remediated according to the IEPA cleanup objectives; a new concrete pad will be poured. Currently, the drums are stored on a portion of the concrete that is undisturbed, but contains minor cracks. Because the unit will have a new base, potential for release to ground water, surface water, air, or on-site soils will be low.

Recommendations: RAI recommends that the facility continue with closure as scheduled.

SWMU 3 **Satellite Accumulation Areas**

Conclusions: The Satellite Accumulation Areas are used to accumulate spent TCE from the 5 degreasers, and spent barium solids from the heat treating operations. The wastes are managed in 55-gallon steel drums, indoors, on top of 6 inches of concrete. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 4 **TCE Drum Storage Area**

Conclusions: The TCE Drum Storage Area is used to manage drums of spent TCE generated from Precision's five degreasers. The spent TCE is managed in 55-gallon steel drums, indoors, on top of 6 inches of concrete. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 5	**Waste Cutting Oil and Coolant Oil Collection Areas**
Conclusions:	The Waste Cutting Oil and Coolant Oil Collection Areas are metal drip trays used to collect nonhazardous waste cutting oil and nonhazardous waste coolant oil that drip off cutting and grinding machines, and 55-gallon steel drums used to collect oil dry. The collection areas are located indoors, on top of 6 inches of concrete flooring. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.
Recommendations:	RAI recommends no further action for this unit.
SWMU 6	**Waste Cutting Oil and Coolant Oil Tanks**
Conclusions:	The Waste Cutting Oil and Coolant Oil Tanks are used to store nonhazardous waste cutting oil and nonhazardous waste coolant oil. The two tanks, (total capacity 3,500 gallons) are located in a concrete pit with a 3,360 gallon capacity. The pit has a drain that leads to a 2,000-gallon secondary containment tank. Because of the more than sufficient secondary containment, potential for release to ground water, surface water, air, or on-site soils is low.
Recommendations:	RAI recommends no further action for this unit.
SWMU 7	**Waste Coolant Oil UST**
Conclusions:	The Waste Coolant Oil UST allegedly only managed nonhazardous coolant oil until 1978. However, during closure of the unit in January 1988, VOC contaminated soil and ground water were encountered. Maecorp is currently using a Soil Vapor Extraction System (SWMU 13) to remediate the contaminated soil. Maecorp has a Proposed Ground Water Remediation System (SWMU 14) to remediate the

contaminated ground water. Once these media are remediated, potential for release will be low. Potential for release to surface water and air will also be low.

Recommendations: RAI recommends that the facility continue with remediation as scheduled.

SWMU 8 **Oil Dry Dumpster**

Conclusions: The Oil Dry Dumpster manages oil dry absorbent used to clean up cutting oil and coolant oil spills. The waste is managed inside a steel dumpster located on top of 6 inches of concrete. The dumpster is covered at all times. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 9 **Carbide Sludge Collection System**

Conclusions: The Carbide Sludge Collection System collects carbide particles generated from grinding carbide drill bits. Carbide particles are collected in a wet vacuum system and deposited in a 150-gallon steel reservoir. The reservoir is located on steel grating above a 3,375-cubic-foot concrete pit. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 10 **Nonhazardous Waste Drum Storage Area**

Conclusions: The Nonhazardous Waste Drum Storage Area temporarily stores nonhazardous waste cutting oil and nonhazardous waste coolant oil

inside 55-gallon steel drums, before ultimate disposal in SWMU 6. The unit will also store nonhazardous carbide sludge beginning July 1992. The unit has cinder block walls and a 6-inch-thick concrete floor. Because the wastes are securely managed, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 11 **Welding Particulate Baghouse**

Conclusions: The Welding Particulate Baghouse collects nonhazardous waste welding particles inside a 55-gallon steel drum. The metal welding particles are vacuumed from the welding operation and settle inside the steel drum. The drum is located on top of 6 inches of concrete. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 12 **Nonhazardous Waste Dumpster**

Conclusions: The Nonhazardous Waste Dumpster collects nonhazardous waste cutting oil particulates and nonhazardous waste welding particles. The wastes are managed indoors, inside a steel dumpster situated on top of 6 inches of concrete. Therefore, potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends no further action for this unit.

SWMU 13 **Soil Vapor Extraction System**

Conclusions: The Soil Vapor Extraction System is remediating VOC contaminated soil detected around SWMU 7 by removing volatile vapors. Potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends that the facility continue with the remediation as scheduled.

SWMU 14 **Proposed Ground Water Remediation System**

Conclusions: The Proposed Ground Water Remediation System is designed to remediate VOC contaminated ground water around SWMU 7. Once operating, the treated water will be discharged to the sanitary sewer under a City of Crystal Lake permit. Potential for release to ground water, surface water, air, or on-site soils is low.

Recommendations: RAI recommends proceeding with the remediation as scheduled.

AOC 1 **Fuel Oil UST**

Conclusions: The Fuel Oil UST was located east of Building 1 and was used to store the facility's oil supply for heating. In January 1988, the UST was cleaned and removed. Analysis of a single soil sample taken detected VOC contamination. Because ground water can be found at a depth of 15 feet, potential for release to this medium is high. Contaminants are below the ground surface; therefore, potential for release to surface water and air is low.

Recommendations: RAI recommends conducting soil and ground water analysis to fully characterize the extent of contamination. If necessary, both media should be remediated.

TABLE 3

SWMU AND AOC SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Barium Washwater Tank	1965 to 1992	None	RAI recommends closure activities continue for this unit.
2. Barium Drum Storage Area	1965 to present	Soil analysis conducted during closure detected barium contamination	RAI recommends closure activities continue for this unit.
3. Satellite Accumulation Area	1965 to present	None	RAI recommends no further action for this unit.
4. TCE Drum Storage Area	1965 to present	None	RAI recommends no further action for this unit.
5. Waste Cutting Oil and Coolant Oil Collection Areas	1965 to present	Some oil and oil dry were observed on the facility floor.	RAI recommends no further action for this unit.
6. Waste Cutting Oil and Coolant Oil Tanks	1965 to present	None	RAI recommends no further action for this unit.
7. Waste Coolant Oil UST	1974 to 1978	VOC contamination of soil and ground water detected during tank closure	RAI recommends remediation continue as scheduled.
8. Oil Dry Dumpster	1965 to present	None	RAI recommends no further action for this unit.
9. Carbide Sludge Collection System	1992 to present	None	RAI recommends no further action for this unit.

TABLE 3 (Continued)

SWMU AND AOC SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
10. Nonhazardous Waste Drum Storage Area	1980 to present	None	RAI recommends no further action for this unit.
11. Welding Particulate Baghouse	1974 to present	None	RAI recommends no further action for this unit.
12. Nonhazardous Waste Dumpster	1974 to present	None	RAI recommends no further action for this unit.
13. Soil Vapor Extraction System	1991 to present	None	RAI recommends remediation continue as scheduled.
14. Proposed Ground Water Remediation System	Not yet operating	None	RAI recommends remediation continue as scheduled.

AOC	Dates of Operation	Evidence of Release	Recommended Further Action
1. Fuel Oil UST	1960s to 1988	VOC-contaminated soil detected during removal	RAI recommends conducting soil and ground water analysis to characterize contamination. If contamination is detected, remediate media.

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IEPA, 1990a. RCRA Inspection, April 17.

IEPA, 1990b. Notice of Compliance for April 17, 1990 RCRA Inspection, July 20.

IEPA, 1991a. Letter from Bruce Ford, IEPA to Barbara Magel, Precision attorney, April 23.

IEPA, 1991b. Permit to Operate Vapor Extraction System, August 22.

IEPA, 1991c. Rejection Letter Concerning Precision's 1989 Closure Plan, December 24.

IEPA, 1992a. Permit to Construct Ground Water Treatment System, February 18.

IEPA, 1992b. Closure Plan Approval, April 23.

Lund, Charles R., 1965. Data from Controlled Drilling Program in McHenry County, Illinois. Illinois State Geological Survey Environmental Geology Notes Number 7, Urbana, Illinois, November.

Maecorp Incorporated (Maecorp), 1992. Closure Plan for Drum Storage Pad and Barium Washwater Storage Tank.

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U.S. Department of Agriculture (USDA), 1965. McHenry County Soils. University of Illinois Agricultural Experiment Station Soil Report 81, Urbana, Illinois.

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U.S. Geological Survey (USGS), 1980. 7.5-minute Topographic Series: Modified McHenry and Crystal Lake Quadrangles, Illinois.

Willman, H.B., 1971. Summary of the Geology of the Chicago Area. Illinois State Geological Survey Circular 460, Urbana, Illinois.

Willman, H.B. and J.A. Lineback, 1970. Surfical Geology of the Chicago Region.

ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD 005 076 567

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Precision Twist Drill Company	301 Industrial Avenue			
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Crystal Lake	IL	60014	McHenry		
09 COORDINATES: LATITUDE	**LONGITUDE**			
42° 15′ 00″ N	088° 18′ 45″ W			

10 DIRECTIONS TO SITE *(Starting from nearest public road)*

Route 176 west to Part Avenue, north on Park to Industrial Avenue, facility.

III. RESPONSIBLE PARTIES

01 OWNER *(if known)*	02 STREET *(Business, mailing residential)*		
Precision Twist Drill Company	301 Industrial Avenue		
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**
Crystal Lake	IL	60014	(815) 459-2040
07 OPERATOR *(If known and different from owner)*	**08 STREET** *(Business, mailing, residential)*		
Same as owner			
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**

13 TYPE OF OWNERSHIP *(Check one)*

☒ A. PRIVATE ☐ B. FEDERAL: _____ *(Agency name)* ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER _____ *(Specify)* ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE *(Check all that apply)*

☒ A. RCRA 3010 DATE RECEIVED: 08 / 18 / 80 (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE *(CERCLA 103 c)* DATE RECEIVED: / / (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 06 / 11 / 92
☐ NO

BY *(Check all that apply)*

☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ *(Specify)*

CONTRACTOR NAME(S): Resource Applications, Inc.

02 SITE STATUS *(Check one)*

☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1965 (BEGINNING YEAR) | Present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Barium, trichloroethene, cutting oil, and coolant oil.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Soil and ground water are contaminated with volatile organic compounds (VOCs). Facility is remediating one area, but potential exists that an additional area might need remediation.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION *(Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)*

☐ A. HIGH *(Inspection required promptly)* ☒ B. MEDIUM *(Inspection required)* ☐ C. LOW *(Inspect on time-available basis)* ☐ D. NONE *(No further action needed; complete current disposition form)*

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF *(Agency/Organization)*			03 TELEPHONE NUMBER
Kevin Pierard	EPA Region V			(312) 886-4448
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Michael W. Gorman		Resource Applications, Inc.	(312) 332-2230	06 / 15 / 92 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD 005 076 567

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- ■ A. SOLID
- □ B. POWDER, FINES
- ■ C. SLUDGE
- □ D. OTHER _____ *(Specify)*
- □ E. SLURRY
- ■ F. LIQUID
- □ G. GAS

02 WASTE QUANTITY AT SITE *(Measures of waste quantities must be independent)*

TON _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

- ■ A. TOXIC
- □ B. CORROSIVE
- □ C. RADIOACTIVE
- □ D. PERSISTENT
- □ E. SOLUBLE
- □ F. INFECTIOUS
- □ G. FLAMMABLE
- □ H. IGNITABLE
- ■ I. HIGHLY VOLATILE
- □ J. EXPLOSIVE
- □ K. REACTIVE
- □ L. INCOMPATIBLE
- □ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	8	Cubic Yards	Nonhazardous waste
OLW	OILY WASTE	35,000	Gallons	Nonhazardous waste
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	660	Gallons	Hazardous, less than 90 day storage
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	.1210	Gallons	Hazardous, less than 90 day storage

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Barium	7440-39-3	Drum/Landfill	Unknown	
	Trichloroethene	79-01-6	Drum/Fuel blending	Unknown	

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

FIW, 1988. Report on UST Closure, March 21.
Precision, 1992b. Closure plan, February 20.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE: IL	02 SITE NUMBER: ILD 005 076 567

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: _____) — □ POTENTIAL — ■ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 630

04 NARRATIVE DESCRIPTION

Ground water is contaminated with VOCs. Facility is in process of remediating media. There is a high probability that another pocket of ground water might be contaminated with VOCs.

01 □ B. SURFACE WATER CONTAMINATION — 02 □ OBSERVED (DATE: _____) — □ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

No surface water contamination has been detected.

01 □ C. CONTAMINATION OF AIR — 02 □ OBSERVED (DATE: _____) — □ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

No air contamination has been detected.

01 □ D. FIRE/EXPLOSIVE CONDITIONS — 02 □ OBSERVED (DATE: _____) — □ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None identified.

01 □ E. DIRECT CONTACT — 02 □ OBSERVED (DATE: _____) — □ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None identified.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 1/88) — □ POTENTIAL — ■ ALLEGED

03 AREA POTENTIALLY AFFECTED: Unknown (Acres)

04 NARRATIVE DESCRIPTION

Soil is contaminated with barium and VOCs. Area contaminated with barium is under remediation. Two separate areas are contaminated with VOCs, one is under remediation, and one has yet to be addressed.

01 ■ G. DRINKING WATER CONTAMINATION — 02 □ OBSERVED (DATE: _____) — ■ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: Unknown

04 NARRATIVE DESCRIPTION

Ground water supplies City of Crystal Lake with drinking water.

01 ■ H. WORKER EXPOSURE/INJURY — 02 □ OBSERVED (DATE: _____) — ■ POTENTIAL — □ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 650

04 NARRATIVE DESCRIPTION

Soil and ground water are contaminated at the facility and there is a low potential for employee exposure.

01 □ I. POPULATION EXPOSURE/INJURY — 02 □ OBSERVED (DATE: _____) — □ POTENTIAL — □ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None identified.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD 005 076 567

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None observed.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

None observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

There is no evidence of food chain contamination.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 650 — 04 NARRATIVE DESCRIPTION

Volatile organic compounds have contaminated soil and ground water and waste barium has contaminated on-site soils. There is a low potential that facility employees will come in contact with the contamination.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

No damage has been documented or observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS — ☐ OBSERVED (DATE: 12/18/80) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None Observed.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

There is no evidence of any illegal or unauthorized dumping of hazardous waste on-site. Potential is low due to site security.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

No other hazards have been documented or were observed.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 18,000

IV. COMMENTS

Facility should address VOC contaminated soil.

V. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

FIW, 1988. Report on UST closure, March 21.
Precision, 1992b. Closure plan, February 20.

ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Precision Twist Drill Company
301 Industrial Avenue
Crystal Lake, Illinois
ILD 005 076 567

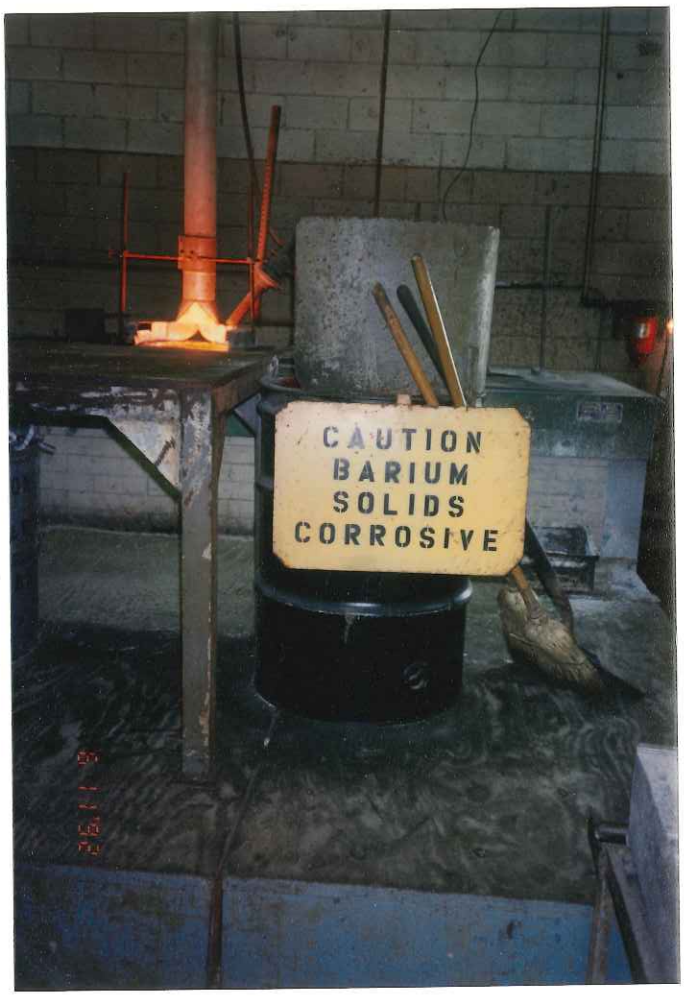
Date:	June 11, 1992
Primary Facility Representative: Representative Telephone No.:	Chuck Mullen, Corporate Safety Director (815) 459-2040
Inspection Team:	Michael W. Gorman, Resource Applications, Inc. (RAI) Tony G. Dominic, RAI
Photographer:	Tony G. Dominic
Weather Conditions:	Sunny, temperature about 75°F
Summary of Activities:	The visual site inspection (VSI) began at 9:00 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents. The VSI tour began at 12:30 p.m. and included a walk-through inspection of the facility in which RAI observed Precision's operations and solid waste management units (SWMUs). The tour concluded at 2:00 p.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 3:00 p.m. RAI identified the following SWMUs at the Precision facility: 1. Barium Washwater Tank 2. Barium Drum Storage Area 3. Satellite Accumulation Areas 4. TCE Drum Storage Area 5. Waste Cutting Oil and Coolant Oil Collection Areas 6. Waste Cutting Oil and Coolant Oil Tanks 7. Waste Coolant Oil UST

8. Oil Dry Dumpster
9. Carbide Sludge Collection System
10. Nonhazardous Waste Drum Storage Area
11. Welding Particulate Baghouse
12. Nonhazardous Waste Dumpster
13. Soil Vapor Extraction System
14. Proposed Ground Water Remediation System

Photograph No. 1 Location: SWMU 1
Orientation: West Date: 6/11/92
Description: The former location of the Barium Washwater Tank.

Photograph No. 2 Location: SWMU 2
Orientation: Southwest Date: 6/11/92
Description: The Barium Drum Storage Area. Manhole cover in foreground leads to secondary containment pit. Broken concrete on right is from soil remediation.

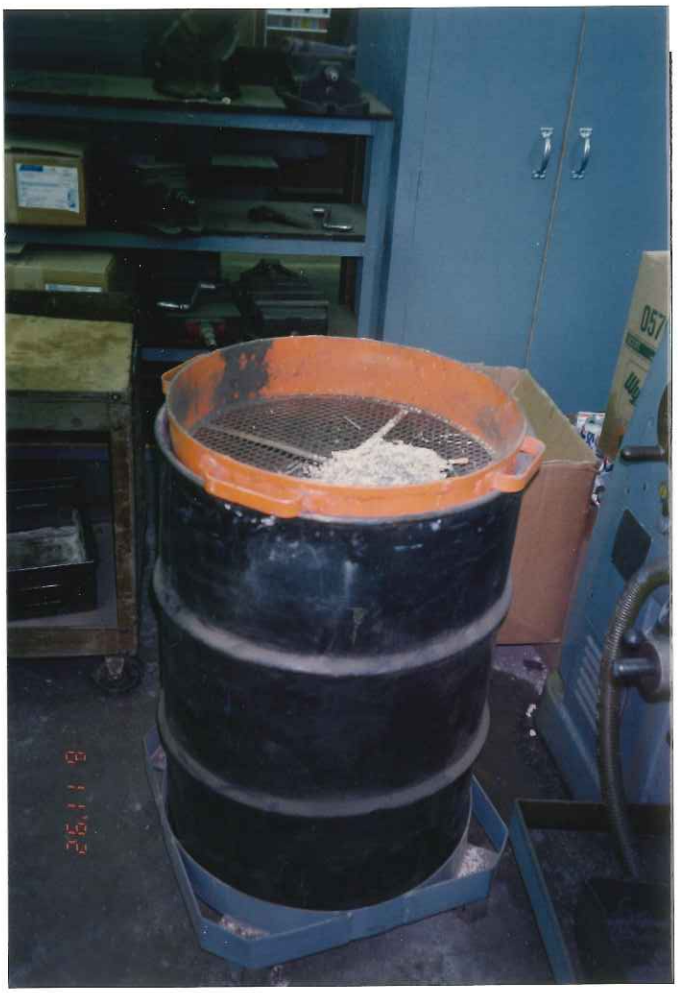
Photograph No. 3 Location: SWMU 3
Orientation: West Date: 6/11/92
Description: Single drum of TCE in Satellite Accumulation Area.



Photograph No. 4 Location: SWMU 3
Orientation: East Date: 6/11/92
Description: Single drum of barium solids in Satellite Accumulation Area.

Photograph No. 5 Location: SWMU 4
Orientation: South Date: 6/11/92
Description: The TCE Drum Storage Area.

Photograph No. 6 Location: SWMU 5
Orientation: Southeast Date: 6/11/92
Description: Drip trays for waste cutting oil and waste coolant oil, managed in Waste Cutting Oil and Coolant Oil Collection Areas.



Photograph No. 7 Location: SWMU 5
Orientation: Northeast Date: 6/11/92
Description: A drum used to collect oil dry in the Waste Cutting Oil and Coolant Oil Collection Areas.

Photograph No. 8 Location: SWMU 6
Orientation: Southwest Date: 6/11/92
Description: The Waste Cutting Oil and Coolant Oil Tanks. The tank containing waste cutting oil is on the right and the tank containing waste coolant oil is on the left.

Photograph No. 9 Location: SWMU 6
Orientation: East Date: 6/11/92
Description: View of the Waste Cutting Oil and Coolant Oil Tanks. Drums on left are rinse waters from closure of SWMU 2. Drums on right are either empty or contain virgin oil.

Photograph No. 10 Location: SWMU 7
Orientation: East Date: 6/11/92
Description: Area where the Waste Coolant Oil UST was closed-in-place. Also area where VOC contaminated soil and ground water has been documented.

Photograph No. 11 Location: SWMU 8
Orientation: South Date: 6/11/92
Description: The Oil Dry Dumpster (foreground). Dumpster in background is for general office refuse.

Photograph No. 12 Location: SWMU 9
Orientation: North Date: 6/11/92
Description: Collection reservoir in the Carbide Sludge Collection System.

Photograph No. 13 Location: SWMU 10
Orientation: South Date: 6/11/92
Description: Drums of waste cutting oil and waste coolant oil in the Nonhazardous Drum Storage Area.

Photograph No. 14 Location: SWMU 11
Orientation: East Date: 6/11/92
Description: The collection area for the Welding Particulate Baghouse.

Photograph No. 15 Location: SWMU 12
Orientation: Northwest Date: 6/11/92
Description: Nonhazardous Waste Dumpster.

Photograph No. 16 Location: SWMU 13
Orientation: South Date: 6/11/92
Description: The trailer containing the Soil Vapor Extraction System to remediate contaminated soil near SWMU 7.

Photograph No. 17 Location: SWMU 14
Orientation: Northeast Date: 6/11/92
Description: The Proposed Ground Water Remediation System will be constructed on the right side of this building (Building 2).

ATTACHMENT C

VISUAL SITE INSPECTION FIELD NOTES

Precision Twist 6-11-92

Chuck Mullen - Precision Sunny 75°

Mike Gorman - RAI

Tony Dominic - RAI

Began operations in 9/65

1954 Before operations facility was operated by Mathew Farm Machinery

Prior to 54 - possibly Ag. land

Employ 650 people 5-6 days 3 shifts

W - Residential

E - Swamp - wetland

N - Mathews farm machinery

S - Residential

Crystal Lake H.S. - SW

City gets H_2O from G.W.

Facility gets H_2O from City

2,000-gal Tank used for industrial wastewater

security - guards during non-business hrs

Interior video for Bld. 3

Get copies Permits - City of Crystal Lake

- IEPA operations permit

Release - only ~~Fe~~ detected release was 10/89

Raw Materials - Steel Bars

Cut into sizes - generates oil & Coolants

Welding

Forming -

? Milling - oil/coolants

Central Oil System Heat Treat - Barium wastes

TCE degreasing Tanks

Grinding - Oil/coolants

Hand Cleaning - oil

Painting - oil

Special Tool - Coolants

Marking - TCE wastewater

TCE stored in Bld. 3

wastewater Barium stored in drums / previously stored in 5,000 Tank

Barium solids = SO1 unit

ewater Oil - ~~50,000~~ ~~7,200~~ -gal virgin oil Tank

Oil/coolants from cutting - pumped into 250-gal totes + transferred to WW Tank

Actually 2 Tanks one for Oil

1500 one for Coolant

USTs

1) 300,000 gal H_2O for sprinkler system
2) UST for secondary containment
3) Diesel Fuel - Removed in 1987 by FIW

Wastes = Oil/Coolants From process
= Bag House Dust Grindings From welding
Exhaust system above welders & Dust is collected in drum
= Barium Washwater
Gen. in heat treat salt lines - Quench - salt line
Drill bits are placed in tank to rinse Ba Every 3-4 wks pumped into 55-gal and transferred to Drum storage
= Barium Solids
residual Ba From drill bits
Bit is shaken above 55-gal drum in S.A.A. & Transferred to B.D.S.
= TCE I used For Degreasing
15-20 gal vat - Cold TCE - submersing
10 gal - vapor degreasing
cleaned weekly. Wastes are dumped into S.A.A. Drum

TCE 2 = 30 gal vapor degreaser
" " 4
= 100 gal
waste is pumped & gravity fed into
55 gal drum & transferred to
TCE Storage
= 20 gal vapor
Carbide ~~Dust~~ sludge = from machining of carbide bits
sludge is shovelled from bottom of
systems & put into 55-gal drum
in S.W.C.A.

Parts washers - Removed in 1986
Since 1986 - S-K began servicing
facility
Oil dry = Clay for oil/coolants, shovelled
into drums Collected in SWCA
& transferred into Oil Dry
Dumpster

Possible SWMUs
~~SA~~
X) S.A.A. for TCE
2) Dumpster for oil sludge Baghouse
3) 1500 gal coolant UST
4) 5000 gal Ba Washwater
5) Baghouse
6) Oil Dry Dumpster
7) Barium D.S.A.
8) Wastewater Coolant/W.oil tanks
9) Solid waste Collection
oil dry/drum of coolant
carbide sludge/oil
10) TCE Storage Area

AOCs
1) Diesel UST
2) TCE Remediation

Waste Water Tank holds
Coolant
Neutralized acidic Cleaner
Neutralize W.W. is shop-vacced from
process into WW Tank

Photo Log

1) S TCE Storage 8' Concrete Floor
2) S 18'x25' Cinder block small cracks
3) E No floor drain
12 drums of spent TCE
4) Oil dry drum
55-gal concrete floor
5) N Oil Return System } Waste is pumped out by shop-vac
6) S " }
7 E Recycable Scrap
8) E TCE Vapor Degreaser
9) W New Carbide system sludge is removed from
10) W bottom tank & Taken to dumpster
11) W Collection Area -? 150 gal reservoir
12) S Waste oil Collection Area for cutting oil
future Carbide sludge Collection
13) S Waste oil & W.W Tanks 10'x30'
14) W Pit area Secondary containment
15) S underneath
16) S Secondary Pit

17) Barium Storage Area open area
18) no secondary containment
19) 13 drums of Ba wash water
20) Drain led to underground Tank
21) 1,000-gal
22) 22 Drums of Ba Solids
23) 20' x ~~50~~ 100' area 8" Thick concrete
24) floor undergoing closure
25 overpacked drums for TCE remediation area
Some cracks numerous core sample holes

Second Roll

1) N Creek near Ba Storage Area
2) E Closure wash drums
3) SW oil Dry Dumpster 15 cu yd on concrete 20'x60'
4) Scrap Dumpsters 5 Bins
Storm H_2O drain leads to sewer 10' away
5) E Baghouse for welding scrap
6) " "
7) Shop-Vac
8) W - TCE Degreaser
9) W - " "
10) W Barium Cleaning Tank.
11) E - Barium Solid Collection 5 lines

3 Ba. lines are currently operating
1 drum each on wooden platform
underlain by concrete

14) Oil sludge & central oil system
15) pit is 20'x50'x15" "
Dumpster for oil sludge " & Baghouse
? 8 yd³ steel dumpster
on concrete

16) Diesel ~~Fuel~~ Oil UST
17) 1500gal UST
18) Cleaner H_2O (acidic)
Neutralized then shop-vaced
& Transferred to WW Tank
19) S.A.A. For TCE
55-gal Drum 30'x50' Bld
Concrete floor Cinder block walls
20) Coolant Accumulation Area
21) Vapor Extraction System for TCE remediation "
22)
23) Former 5000 gal Tank
had 7600 gal containment
Tank
24) Remediation Area for TCE

Get Copies

1) Fuel or Diesel oil UST removal

2) Coolant UST removal

3) Permits

ATTACHMENT D

SOIL CLEANUP OBJECTIVES FOR SWMU 2

(Source: IEPA, 1992b)

Parameter	Objective (mg/kg)	ADL (mg/kg)
Barium (TCLP)	2 mg/l	0.2 mg/l
Chromium (TCLP)	0.1 mg/l	0.01 mg/l
Lead (TCLP)	0.0075 mg/l	0.005 mg/l
1,1 Dichloroethane	0.7	0.00002
1,2 Dichloroethane	0.005	0.00002
1,1 Dichloroethene	0.007	0.00003
cis-1,2 Dichloroethene	0.07	0.0002
trans-1,2 Dichloroethene	0.1	0.00002
Methylene Chloride	0.005	0.0002
Tetrachloroethene	0.005	0.00001
Trichloroethene	0.005	0.00001
Vinyl Chloride	0.002	0.00006
Anthracene	42.0	0.66
Benzo(a)anthracene	0.0026	0.0087
Benzo(a)pyrene	0.0046	0.015
Benzo(b)fluoranthene	0.0036	0.012
Benzo(k)fluoranthene	0.0034	0.011
Chrysene	0.03	0.1
Dibenzo(a,h)anthracene	0.006	0.02
Fluoranthene	5.6	0.14
Indeno(1,2,3-c,d)pyrene	0.0086	0.029
Naphthalene	0.025	0.0006
Pyrene	4.2	0.18
Other Non-Carcinogenic PNAs	4.2	
Acenaphthylene		0.66
Benzo(g,h,i)perylene		0.051
Phenanthrene		0.66

NOTES

ADL: Acceptable Detection Limit; lowest Practical Quantitation Limit (PQL) from SW846.

ADLs have been set by CROPA for those substances where health or environmentally based cleanup objectives are below commonly attainable analytical detection limits. The stated cleanup objectives remain the goals; however, the Agency will accept analyses as proof of acceptable cleanup if they: (1) show no detection, (2) have a detection limit at, or below, the Acceptable Detection Limit, and (3) are consistent with SW-846 quality assurance criteria.

TCLP: Toxicity Characteristic Leaching Procedure (Method 1311 of Test Methods for Evaluating Solid Waste, Third Edition, SW-846)

ATTACHMENT E

SOIL AND GROUND WATER CLEANUP OBJECTIVES FOR SWMU 7

(Source: IEPA, 1991a)

GROUNDWATER CLEANUP OBJECTIVES

Parameter	Groundwater Objective (ug/l)	Decision Basis	Water ADL (ug/l)
Barium	2,000.	MCL	200.
Acenaphthene	2,100.	RfD + Treatment	10.
Anthracene	10,500.	RfD + Treatment	6.6
Flouranthene	1,400.	RfD + Treatment	2.1
Flourene	1,400.	RfD + Treatment	2.1
Naphthalene	39.	RfD + Treatment	10.
Pyrene	1,050.	RfD + Treatment	2.7
Benzene	25.	MCL + Treatment	2.
Ethylbenzene	1,000.	MCL + Treatment	2.
Toluene	2,500.	MCL + Treatment	2.
Xylene (total)	10,000.	MCL	5.
Chloroform	2.5	ADL + Treatment	0.5
1,1-Dichloroethane	3.5	RfD + Treatment	0.7
1,1-Dichloroethylene	35.	MCL + Treatment	1.3
1,3-Dichlorobenzene	ND	ND	3.2
1,4-Dichlorobenzene	375.	MCL + Treatment	2.4
Cis 1,2-Dichloroethylene	200.	MCL + Treatment(based on total)	5.0
Trans-1,2 Dichloroethylene	500.	MCL + Treatment	1.0
Methylene Chloride	25.	ADL + Treatment	5.
4-Methyl-2-Pentanone *	ND	ND	5.
Tetrachloroethylene	25.	MCL + Treatment	0.3
Trichloroethylene	25.	MCL + Treatment	1.2
1,1,1 Trichloroethane	1,000.	MCL + Treatment	0.3
Vinyl Chloride	10.	MCL + Treatment	1.8
Total Carcinogenic PNA's	1.000	PMCL + Treatment	
Benzo(a)anthracene			0.13
Benzo(a)pyrene			0.23
Benzo(b)fluoranthene			0.18
Benzo(k)fluoranthene			0.17
Chrysene			1.5
Dibenzo(a,h)anthracene			0.3
Indeno(1,2,3-c,d)pyrene			0.43
Total Non-Carcinogenic PNA's	1050.	RfD for pyrene + treatment	
Acenapthylene			10.
Benzo(g,h,i)perylene			0.76
Phenanthrene			6.4

ADL - Acceptable Detection Limit, Lowest Practical Quantitation Limit (PQL) as defined in SW846, when used as a basis, identified Group A or B carcinogens.

RfD - Reference Dose Method

PMCL - Proposed Maximum Contaminant Level

MCL - Maximum Contaminant Level

TCLP - Toxicity Characteristics Leaching Procedure

ND - No Data

* - RfD used for previous cleanups is being re-evaluated by USEPA. If MIBK is still detected after the other objectives are met, it should be returned to COT/CROPA for further review.

SOIL CLEANUP OBJECTIVES

Parameter	Objective (ug/kg)	Decision Basis	Soil ADL (ug/kg)
Barium	2,000.	TCLP	10,000.
Acenaphthene	42,000.	20 X (RfD & Treatment)	330.
Anthracene	210,000.	20 X (RfD & Treatment)	660.
Flouranthene	28,000.	20 X (RfD & Treatment)	140.
Flourene	28,000.	20 X (RfD & Treatment)	140.
Naphthalene	39.	RfD + Treatment	330.
Pyrene	21,000.	20 X (RfD & Treatment)	180.
Benzene	25.	MCL + Treatment	2.
Ethylbenzene	1,000.	MCL + Treatment	2.
Toluene	2,500.	MCL + Treatment	2.
Xylene (total)	10,000.	MCL	5.
Chloroform	2.5	ADL + Treatment	0.5
1,1-Dichloroethane	3.5	(RfD + Treatment)	0.7
1,1-Dichloroethylene	35.	MCL + Treatment	1.3
1,3-Dichlorobenzene	ND	ND	3.2
1,4-Dichlorobenzene	375.	MCL + Treatment	2.4
Cis 1,2-Dichloroethylene	200.	MCL + Treatment(based on total)	5.
Trans-1,2 Dichloroethylene	500.	MCL + Treatment	1.0
Methylene Chloride	25.	ADL + Treatment	5.0
4-Methyl-2-Pentanone *	ND	ND	5.
Tetrachloroethylene	25.	MCL + Treatment	0.3
Trichloroethylene	25.	MCL + Treatment	1.2
1,1,1 Trichloroethane	1,000.	MCL + Treatment	0.3
Vinyl Chloride	10.	MCL + Treatment	1.8
Total Carcinogenic PNA's	20.	20 X (PMCL + Treatment)	
Benzo(a)anthracene			8.7
Benzo(a)pyrene			15.
Benzo(b)fluoranthene			11.
Benzo(k)fluoranthene			11.
Chrysene			100.
Dibenzo(a,h)anthracene			20.
Indeno(1,2,3-c,d)pyrene			29.
Total Non-Carcinogenic PNA's	21,000.	20 X (RfD for pyrene + treatment)	
Acenapthylene			660.
Benzo(g,h,i)perylene			51.
Phenanthrene			660.

ADL - Acceptable Detection Limit, Lowest Practical Quantitation Limit (PQL) as defined in SW846, when used as a basis, identified Group A or B carcinogens.

RfD - Reference Dose Method

PMCL - Proposed Maximum Contaminant Level

MCL - Maximum Contaminant Level

TCLP - Toxicity Characteristics Leaching Procedure

ND - No Data

* - RfD used for previous cleanups is being re-evaluated by USEPA. If MIBK is still detected after the other objectives are met, it should be returned to COI/CROPA for further review.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

June 4, 1992

Mr. Chuck Mullen, Corporate Safety Director
Precision Twist Drill Company
301 Industrial Drive
Crystal Lake, Illinois 60012

Re: Visual Site Inspection
Precision Twist Drill Company
ILD 005 076 567

Dear Mr. Mullen:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for June 11, 1992, at 8:30 a.m. The inspection team will consist of Michael W. Gorman and Tony G. Dominic of Resource Applications, Inc., a contractor for the U.S. EPA. Representatives of the Illinois Environmental Protection Agency (IEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with the present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI. Attachment II is a summary of the information required.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,

Francine M. Harris

Kevin M. Pierard, Chief
OH/MN Technical Enforcement Section

enclosure

cc: Larry Eastep, IEPA, Springfield, IL
Cliff Gould, IEPA, Maywood, IL

ATTACHMENT I

Precision Twist Drill Company
301 Industrial Drive
Crystal Lake, Illinois 60012

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows.

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

ATTACHMENT II

PROBABLE SOLID WASTE MANAGEMENT UNITS (SWMUs)

1. Little information was available to compile a list of solid waste management units (SWMUs) at your facility. Please list all waste management units at your facility. If possible, please provide as complete information for the waste unit in response to the questions below.

   From the list of probable SWMUs please address the following questions:

   - Do the above SWMUs still exist at the facility and are they in operation?
   - What are the start-up and closure dates of the above SWMUs?
   - What types of wastes are the SWMUs currently/formerly used for?
   - Name any SWMUs at your facility that have not been listed above. These would include hazardous waste storage areas, treatment units, or any other area or system at your facility dealing with hazardous waste including satellite accumulation areas.
   - What are the average volumes and rates of generation of waste streams?
   - Document any releases that have occurred at the facility. This includes spills or leaks of both wastes and raw product. Outline the action taken to clean up the release.

2. Please supply as much information as possible concerning the site history. This would include any information you have regarding past operations and any former owners/operators at this location.

3. Please provide a description of the primary processes taking place at your facility and the waste streams which are generated.

4. Describe the methods of treatment and disposal of generated waste utilized by your facility.

If available, the following items are requested:

- A detailed map of the facility showing current and former locations of SWMUs and production stations.
- Flow diagrams showing waste streams and waste management practices.
- Copies of any permits currently held by the facility.
- SARA Title III information and a copy of the facility contingency plan.